

PREFATORY NOTE

These transcripts have been produced from the original raw transcripts in the FOMC Secretariat's files. The Secretariat has lightly edited the originals to facilitate the reader's understanding. Where one or more words were missed or garbled in the transcription, the notation "unintelligible" has been inserted. In some instances, words have been added in brackets to complete a speaker's thought or to correct an obvious transcription error or misstatement.

Errors undoubtedly remain. The raw transcripts were not fully edited for accuracy at the time they were produced because they were intended only as an aid to the Secretariat in preparing the records of the Committee's policy actions. The edited transcripts have not been reviewed by present or past members of the Committee.

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Meeting of the Federal Open Market Committee

December 13-14, 1988

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, December 13, 1988, at 2:30 p.m. and continuing on Wednesday, December 14, 1988, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. Corrigan, Vice Chairman
Mr. Angell
Mr. Black
Mr. Forrestal
Mr. Heller
Mr. Hoskins
Mr. Johnson
Mr. Kelley
Mr. LaWare
Mr. Parry
Ms. Seger

Messrs. Guffey, Keehn, and Melzer, Alternate
Members of the Federal Open Market Committee

Messrs. Boehne, Boykin, and Stern, Presidents of the
Federal Reserve Banks of Philadelphia, Dallas, and
Minneapolis, respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Assistant Secretary
Mr. Bradfield, General Counsel
Mr. Patrikis, Deputy General Counsel
Mr. Prell, Economist
Mr. Truman,¹ Economist

Messrs. Beebe, Broadus, J. Davis, R. Davis,
Lindsey, Siegman, Simpson, and Ms. Tschinkel,
Associate Economists

Mr. Sternlight, Manager for Domestic Operations,
System Open Market Account
Mr. Cross, Manager for Foreign Operations,
System Open Market Account

1. Attended Wednesday session only.

Mr. Coyne, Assistant to the Board, Board of Governors
Mr. Ettin, Deputy Director, Division of Research and
Statistics, Board of Governors
Mr. Promisel, Senior Associate Director, Division of
International Finance, Board of Governors
Mr. Stockton, Assistant Director, Division of Research
and Statistics, Board of Governors
Messrs. Feinman and Rea,² Economists, Division of
Monetary Affairs
Mr. Keleher, Assistant to Governor Johnson, Office of
Board Members, Board of Governors
Mr. Wajid, Assistant to Governor Heller, Office of
Board Members, Board of Governors
Mr. Gillum, Economist, Open Market Secretariat, Division
of Monetary Affairs, Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of
Monetary Affairs, Board of Governors

Mr. Eisenmenger, First Vice President, Federal Reserve Bank
of Boston
Messrs. Balbach, T. Davis, Lang, Rosenblum,
and Scheld, Senior Vice Presidents, Federal Reserve
Banks of St. Louis, Kansas City, Philadelphia,
Dallas, and Chicago, respectively

Ms. Lovett, Messrs. McNees and Miller, Vice Presidents,
Federal Reserve Banks of New York, Boston, and
Minneapolis, respectively

2. Attended portion of Tuesday's meeting relating to review of recent experience with borrowing and the federal funds rate and the implementation of open market operations.

Transcript of Federal Open Market Committee Meeting
of December 13-14, 1988

December 13, 1988--Afternoon Session

CHAIRMAN GREENSPAN. Would somebody like to move the minutes to get started?

MS. SEGER. I'll do it.

CHAIRMAN GREENSPAN. Second?

VICE CHAIRMAN CORRIGAN. Second.

CHAIRMAN GREENSPAN. Without objection they are approved. Mr. Cross, would you bring us up to date on foreign currency operations?

MR. CROSS. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Any questions for Mr. Cross?

MR. BOEHNE. Could you elaborate on your comments about the German mark--the view that the mark is too weak?

MR. CROSS. I didn't say that I thought it was too weak.

MR. BOEHNE. I know. The Chairman thinks it's too weak, but it's at the top of the snake, is it not?

MR. CROSS. The mark has weakened some during the course of this year on a weighted-average basis. At the same time, the German current account balance has been strengthening, their trade balance has been strengthening. Now with us, our trade balance has been improving, Mr. Chairman. There is a European entry factor or element to this, and the Germans have been increasing their trade balance with a number of their European partners, both in the EMS and outside the EMS. So, their concern has been that the mark not appear to be too weak during the period when they see the trade balance strengthening.

MR. FORRESTAL. Sam, it was reported this morning that perhaps the market is looking for a trade number of around \$10 to \$11 billion. Is that your assessment of what they are looking for?

MR. CROSS. Well, we have heard numbers anywhere from \$8-1/2 to \$12-1/2 billion. Now, it gets a little confusing because there are two bases for calculating it these days, and we are not always sure people are talking in the same terms. The general view seems to be that the trade deficit will be around \$10 billion this time. But there are some--

CHAIRMAN GREENSPAN. That's with seasonal adjustment?

MR. CROSS. That's CIF, yes.

CHAIRMAN GREENSPAN. CIF, with seasonal adjustment?

MR. CROSS. Yes, CIF and seasonally adjusted.

MR. FORRESTAL. So, with anything above \$10 billion, you'd expect some pressures on the dollar?

MR. CROSS. Well, I wouldn't jump to any big conclusions because we've had other occasions when the number came in very well and the dollar moved down. I believe the market has seen that it's possible to get hurt by shorting the dollar too much. And I think the trade figures are certainly hanging over the market in an important way. So I think a lot of participants are not anxious to do too much until then. It could be that a good trade figure would provide a little more support, but it's not a sure thing.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. If this is too silly a question, tell me and I will retract it. How do you decide, when you intervene, whether to really come in like "gangbusters" or to make sort of an anemic effort? In your comments, it sounded to me as if you said that earlier in the month market participants were disappointed with our intervention--I'm paraphrasing--because it looked as if we were just trying to let the dollar down easily and we weren't really trying to hold it up. Did we really intend that?

MR. CROSS. That was not our intention and indeed when I got asked, at the press conference when we released this quarterly report, whether we were just trying to smooth the dollar, I said we weren't. We are trying to do more than that.

MS. SEGER. So, why didn't we go in and really hit it then?

MR. CROSS. Well, for one thing, unless you're really going to intervene in very, very large amounts it's not always crystal clear just what the reaction is going to be to an expenditure of 'X' amount of dollars. But also we have to work this out very closely with our colleagues in the Treasury who may or may not feel that it is a good idea to intervene very strongly at a particular time. And, also, not in the precise amounts always, but we do try to coordinate our efforts with the other central banks so that we all give the same kind of message. There were occasions in this period when a number of people in the market thought that our efforts were not big enough really to smack the exchange rate in a decisive way. I do think that over a period of several weeks as we continued to do this that the cumulative effect of this became more noticeable and more important.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. Any other questions for Mr. Cross? If not, would somebody like to move to ratify the transactions since the November meeting?

VICE CHAIRMAN CORRIGAN. So moved.

MS. SEGER. Second.

CHAIRMAN GREENSPAN. Without objection. Mr. Sternlight.

MR. STERNLIGHT. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Mr. Sternlight?

MR. MELZER. Peter, what's in the market in terms of the confusion over borrowings? How are people interpreting policy right now, and how importantly do borrowings figure into that?

MR. STERNLIGHT. Well, I think there was a realization as we went through November that we must have made some allowance for what the market also perceived as a change in the relationship between federal funds and borrowings. In fact, on the very day the Committee was having that conference call--November 22--I happened to read one of the market letters, and the writer assumed that we were probably using something like \$400 million rather than \$600 million, so that particular analyst happened to hit it right on the head. The further source of confusion or uncertainty was the spikes in borrowing from some of these technical problems. The market has an idea that those have been a factor. I don't think they know the precise dimensions of it, but they generally have become aware of the problems in the wire mechanisms and in fact are aware that a particular bank was unable to move its funds out, and the ones who were supposed to get funds know very well that there were problems and hangups from that.

MR. HOSKINS. Peter, I'm unclear how you decide how much to adjust in terms of borrowings versus how much to accept in terms of the rise in the federal funds rate on a daily basis. One thing we could do is maybe have Don Kohn arrange for borrowings to hold a range for the funds rate. But it's not clear to me when you decide to accept a funds rate and when you decide not to accept it.

MR. STERNLIGHT. Well, we generally speak of an expectation of a funds rate that would prevail given a certain level of borrowing. And I think right along we've felt that there is some degree of flexibility of--oh, I don't know--at least 1/8th percentage point on either side of whatever is the central point. And certainly for a given day it's even more room than that. It's more the persistent deviations that would be a problem. As the deviations build up to be greater than 1/8th or 1/4th percentage point and more persistent, then I think it creates the kind of problem that led to the discussion held on November 22 where it was felt that maybe a discrete adjustment of the borrowing level was in order. I don't know if I have the precise formula. It is something that's talked about daily and in discussions that people at the Desk would have with Don [Kohn] and his associates.

MR. BLACK. Peter, is it fair to say that most differences have been resolved in favor of the federal funds rate?

MR. STERNLIGHT. Well, we came through periods in this recent intermeeting interval where the deviations got to be sufficient so that the concern about the funds rate moving too far did become a constraint. I think I can say that in the period just since the November conference call, there was a fair amount of flexibility given to letting the funds rate move. We started out saying at that November call that we expected funds to be around 8-3/8 percent, and it seems to me it was largely market expectations that brought the rate up to 8-1/2 and 8-5/8 percent on a number of days. We were putting in reserves at that time, but we were doing it mainly with an eye to the reserve needs and not with such extraordinary intensity that getting funds back down to 8-3/8 percent was an overriding

objective. I think we were allowing some flexibility in the funds rate that emerged in that period in the context of the information that had come along in the market and given the asymmetric directive and all.

MR. BLACK. Yes, I was on the [morning conference] call this time, and I think that's an excellent description of what you did. I was really referring to the longer run. It seems to me that in the past most of them have been resolved in favor of the federal funds rate. Not all certainly, but I think that's what it has usually yielded.

MR. KEEHN. Peter, you commented on the 30-year [unintelligible]. Is there an expectation that we will do more, or [what] is the market reaction to what we've done so far?

MR. STERNLIGHT. I think the market expects that probably we'll be exercising more restraint over the near term. Many people would expect to see by year-end, [unintelligible] or maybe going into early next year, that funds would push higher, that there would be additional restraint exercised against the strength of the economy.

CHAIRMAN GREENSPAN. That's an interesting question of whether you combine the premium on the [forward] markets of the federal funds rate with the shape of the yield [curve for] bonds. And I think that the markets certainly are looking at (1) the forward market and the funds rate, and (2) the spreads between the funds rate and the bill rate and CD rates. I think you can clearly see that implicit in the short end of the market is the expectation that the funds rate will be higher over the next 30, 60 days. Any further questions for Peter? If not, would somebody move to ratify his actions since the last meeting?

SPEAKER(?). So moved.

VICE CHAIRMAN CORRIGAN. So moved.

CHAIRMAN GREENSPAN. Without objection. Before we get involved with the borrowing and funds rate relationship and its--, I guess this naturally brings us to Don Kohn and the most recent [unintelligible]. The larger [unintelligible] the less we know.

MR. KOHN. That's probably right. Actually they were overwrought, right?

CHAIRMAN GREENSPAN. They were thrilled.

MR. KOHN. [Unintelligible]. We are not Mozart, we recognize that. I have only a little to add to the memos we've already seen and to the comments Peter already has made in today's discussion. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Mr. Kohn?

MR. JOHNSON. I think you're right. I mean, that was a well done explanation. And as you pointed out, what resulted was probably not much different, but I think that's because of the flexibility that was pursued by the Desk. I really would hate to think of what the

result would have been if you had actually tried systematically to produce that borrowing target. This is just more evidence in my opinion of the need for flexibility and sensitivity toward the funds rate in situations like this. Since I've been here, there have been, in my opinion, more periods of instability in the borrowing function than of stability. And so I'm not at all against this procedure as long as it's flexible. But trying to blindly pursue that problem target is very hazardous.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Well, on previous occasions I've said that I was always amazed that \$100 million changes could move the economy around like a [unintelligible]. I think the current [unintelligible] shows that it is very difficult to have a stable relationship between something that small and something that large. It's sort of like having a big pyramid standing exactly on its tip. Making minute adjustments at the bottom can balance the pyramid, but it's not at all clear that that will always avoid major movement of the pyramid either. In any case, like Mr. Johnson said, as soon as we see some instability there, we are ready to abandon the operating procedures that we have, and we immediately go back to federal funds targeting.

I sent around a paper from the OECD and last week [at the OECD meeting] there was a topic of discussion indicating that virtually every single country represented around the table had an operating procedure that was focusing on a federal funds rate equivalent. On the other hand, a number of the countries typically used a monetary growth range for various aggregates as medium-term targets. And, on balance, I think that is probably as good a combination as one can get. You know, use the fed funds operating target itself and then have a medium range monetary growth objective in mind and steer the federal funds rate in order to attain that target. That allows for deviations like those specified in Don Kohn's paper. That's a very good paper, a very thorough discussion. These velocity changes that we can assess and predict with pretty good accuracy [unintelligible] might be amazed in that respect [unintelligible] take that into account. As a result, I think we could have a very consistent package that would allow us to attain the targets with a higher degree of precision than the borrowing target procedure allows us. What I would do with borrowings is use it as an indicator variable, a variable to watch along with the others. Then you would get the market signals, the market feedback, that you could still take into account and incorporate along with the other things that we are watching, but you would do so in a systematic and explicit fashion. Thank you.

CHAIRMAN GREENSPAN. Further comments? Governor Seger.

MS. SEGER. I just have a question. How bad does the relationship have to get, or how unreliable, before we should drop this approach?

MR. KOHN. I don't know.

MS. SEGER. So, as Manley Johnson indicates, it seems that the rule has been that the relationship hasn't been super terrific rather than that being the exception over the last four years or so.

MR. KOHN. That's a question the Committee has to answer. I would say that we tend to focus on the shifts; that's when the issue is brought to the attention of the Committee and when the discussions occur. It's not clear to me that we don't have long periods in which the relationship is sufficiently on track to get approximately the money market conditions that the Committee thought it was getting when it specified the borrowing objective. There have been periodic shifts to be sure. I can't answer for the Committee what its range of tolerance is. I think I tried to indicate in my closing remarks that I thought that by treating both the money market conditions and the borrowing flexibly, we had gotten through what could have been a very difficult period without having to key very firmly on specific federal funds rates and getting locked into narrow federal funds targeting so that we retain the basic borrowing objective. But at the same time, Mr. Sternlight was sensitive to the potential for the funds rate getting way out of whack with what the Committee expected. So, some sort of compromise was worked out that in my view worked out pretty well in the end.

MS. SEGER. If you were a robot and you just had pushed for the \$600 million and kept going until you got it, what would your guess be as to where the federal funds rate might have gone?

MR. KOHN. [Unintelligible]. We have in the Bluebook an indication that under alternative "C," \$600 million, that the funds rate would be getting up toward 9 percent.

MS. SEGER. You don't think you'd go over that?

MR. PARRY. That's after an end-of-year adjustment as well? I mean, it could even be higher in the short term?

MR. KOHN. It could be higher over short periods of time, that's right. I think it would settle down.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, as I've indicated a lot of times, what I hope we are going to move to eventually is some kind of reserve targets and make the necessary institutional changes so they'll work. I think it's important in the interim that we recognize that this borrowed reserve target is not a reserve target in the usual sense. The real instrument under current procedures, as I perceive it, is the federal funds rate because this is what determines the demand for money and consequently the rate of growth in the aggregates. And the borrowing is simply the device that we use to try to control the federal funds rate. I think it has confused us, and it has confused the markets on occasion. I remember that Manley and I were arguing this back at the March meeting I think it was. I would favor adopting, if we could get a consensus, a wider range for the federal funds rate and dropping the borrowing target. I would then give the Desk, in consultation with you [Chairman Greenspan], enough freedom to move anywhere within this half percentage point limit [for the federal funds rate] that seems consistent with the directive. I still favor that. I think this [recent intermeeting] period illustrated that. I think Peter Sternlight handled it beautifully the way he jumped back

from one and then the other. I do think most of the time we have resolved it in favor of the federal funds rate where there were differences. And I think that's the more important of the two.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. The disturbances or shifts seem to be larger in terms of magnitude more recently, which naturally raises concern about what do I look for going forward. And during the time period in which we were setting policy, I think my concerns were the same as President Black's--that we were confusing the public as to what we were about, and certainly if we were to keep talking about reserve restraint as opposed to fed funds rates. Somehow, I think it might be clearer if we did one or the other. The flexibility, it seems to me, simply gives a perception, at least in my mind and perhaps for some others, that we are doing nothing but following market rates up and not making policy directly. That is, we simply support whatever the market believes rates ought to be. So, I guess in that sense I'd be happy to cut it one way or the other or to have a more formal agreement on what we are doing with a range for borrowings. But if it turns out that the funds rate is what we ought to use, and if it has a wider band, I can support that position.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Well, I think we need to step back from just the narrow issue of this procedure or that procedure and ask the broader question about policy itself. And I think in the last several years that policy has generally been good. If you compare what has happened in the last several years and went back over the last 20 years or so, I think in general we have done most of what should have been done in this particular cycle. And I think that that is borne out by the life of the cycle and the fairly good control we've had over inflation. Now, the issue is, has this procedure been helpful to us in achieving that goal? Have we achieved good policy in spite of this procedure? My own sense is that this procedure has been helpful in guiding us toward better policy. No procedure is perfect. And I think we've found that, whatever procedure we've used, there are always times when you have to override it. And Manley Johnson's point is correct that at some point we have to override it so much that maybe we ought to look around. But on the whole, looking at the broad picture, I think that this procedure has served us well and has made for better policy.

MR. JOHNSON. Actually, I'm not suggesting that I would disapprove of the way the Desk has managed lately. I think it was handled with sensitivity--with a sensitivity that I wouldn't mind seeing [in the future]. I mean, my concern has always been with a strict borrowing target.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I also think that operations were handled very well in this period. But I have the general sense that we are moving closer to a funds rate targeting regime, and I agree with the comments about the confusion that that can create internally and externally. I think in general--and I believe for reasons that Ed Boehne was implying without saying--that it has helped us to define our business, if you will, as being reserves and not interest rates [even though we]

characterize changes in policy as changes in the degree of reserve restraint as opposed to changes in a target for a market interest rate. I think that's helpful in deflecting political pressures and so forth, but if we continue to move closer in a sense to a funds rate target I feel we ought to be explicit about that. But if we did, I personally would feel very strongly about having a different proviso than we have right now. In effect, the borrowed reserves regime is targeting the funds rate, and then we have a proviso based on the funds rate that really can never be operative. So, were we to go explicitly to that, I'd like to see, if we had had at times in the past some kind of proviso based on the reserve base, whether that would have given us the kind of balance I think we are looking for in the directive.

I guess, finally, I might ask just a rhetorical question, and this is part of the confusion: How are we going to describe what's happened in this intermeeting period where in my mind the degree of reserve restraint has been measured by the borrowings target that has been set? In effect, we are saying we really increased the degree of reserve restraint at the same time that the borrowings target has come down. I think that puts the confusion in perspective. If you describe the degree of reserve restraint in terms of what balances the funds rate, that's one thing. But in my mind that's not really what "degree of reserve restraint" meant. Why don't I just leave it at that? I'm not sure that's easily answerable, and I think I know how we can do it.

MR. KOHN. We, of course, added or suggested the addition of a paragraph to the policy record describing the November 22 meeting, which attempts to reconcile those two things.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Well, Mr. Chairman, it seems to me this was a very good and a very enlightening paper and one of the things that it sought to do is to uncover reasons for the lack of borrowing and I think all of those given were very plausible. One other occurred to me and that is that we have not changed the discount rate very often recently and there may be a perception in the market that our failure to move very often on the discount rate will in effect increase the spread between the discount rate and the federal funds rate as we go forward and therefore produce a greater hesitancy on the part of banks to borrow at the discount window. Whatever the reason, we have this shortfall. As I've thought about this, it strikes me that we are in effect targeting the federal funds rate; we are really doing that. And I think I understand all of the reasons why we don't want to admit that we are targeting the funds rate. But since the periods of instability seem to be greater than the periods of stability, I wonder if the time hasn't come to really examine this procedure and perhaps just confirm what we are really doing and that is targeting that rate. I wouldn't do it now because I think we are in a period where we had some confusion in the market due to computer failures and we are at the end of the year. So, I think we need to have a little more evidence as to whether or not this relationship will come back to a more acceptable level. But I think the time really has come for us perhaps to think very seriously about going to a pure funds targeting, not the 1/8 percentage point degree of precision that was attempted before but some range of federal funds rate targeting. Now, I agree

with what's been said about our policy having been pretty good over the last couple of years following the current procedure, but I think the policy results have been obtained basically because of the flexibility exercised by the Desk rather than because of the procedure itself. So, rather than continue to produce memos about this, talk about it all the time, I think maybe the time has come to examine it very carefully and make a decision in the early part of 1989.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. Well, it's been an interesting discussion over the years, and I've always said that you are analytically correct and it's good to have you and Don agreeing on that. But there's a very important point that I think we have to keep in mind, and there's a very important reason that we do not want to target the federal funds rate explicitly. The discount rate is now an announcement instrument. And if we explicitly choose a federal funds target and we change that by 25 basis points, or change it by 12-1/2 basis points or 50 basis points, then that part of open market operations becomes an announcement target just like the discount rate is. And I believe it's [unintelligible] to have two kinds of instruments, one instrument that we use that's subtle, that's not quickly understood and has the camouflage of market forces at work, and another policy instrument that's very clear and has an announcement effect. So, I would never favor going to explicit federal funds targeting even though that is a way to accomplish exactly what we wish to accomplish. It carries an announcement effect with it that I would not prefer. What I would prefer doing, Don, is to examine quite a few options other than the existing options to accomplish the same kind of program and maybe some that might be able to accomplish it with some more regularity. I've talked from time to time with you about a total reserves [target] and a scheduled total reserves which could give you whatever elasticity you choose. A variant that we sometimes refer to as the [unintelligible] would in a sense give you a total reserve [target] with a cap on it on both sides. But I think there are other ways we might explore without going to explicit federal funds targeting.

MR. BLACK. Wayne, wouldn't a lot of that announcement effect be lost since this wouldn't be released until Friday following the next Federal Open Market Committee meeting?

MR. ANGELL. Well, if we were to give the Desk, let's say, an explicit 8-5/8 percent funds rate to shoot for within a specified range, once you change that rate it's going to be known immediately in the market--as it was previously when explicit funds rate targeting was used.

CHAIRMAN GREENSPAN. Well, one fact I want to throw on the table with respect to this is that with very rare exceptions I don't recall the Desk operating on both sides of the market during one maintenance period. In other words, if you're going to focus on an explicit funds rate with an announcement effect, you're going to have to be in there generally not just once a day on one side throughout the whole maintenance period but you're going to have play it on both sides. And I think that gives a different statistic than 8-5/8. I think that if you're forced to stay on one side you can't, even if you wanted to, calibrate a funds rate target exactly.

MR. ANGELL. Are you suggesting you can have an explicit federal funds target--and nothing else--and that's the instruction in the directive, and not have the market perceive precisely that we have a fed funds target, and the market wouldn't know when we have a 25 basis point change?

CHAIRMAN GREENSPAN. I think it makes a difference how the Desk endeavors to calibrate that particular fed funds rate. Am I correct that we used to be in the market more than once a day and we used to be in on both sides?

MR. KOHN. On occasion.

MR. STERNLIGHT. Well, I don't know that we were in on both sides in a single day, but certainly we had multiple entries on given days when we were targeting the funds rate.

SPEAKER(?). Well, in the same week.

MR. KOHN. But we were focusing on [unintelligible] in the early 1970s.

CHAIRMAN GREENSPAN. So, I think even though it's certainly the case that we are moving toward a federal funds target, we are still quite a long way from that procedure because most of the actual activity is determined by the borrowing requirement. I grant you that you could get the effect you're talking about but I'm not sure that it--

MR. ANGELL. Well, I'm saying that I prefer to have some arrangement to keep us from having explicit fed funds targets become apparent to the market and having some announcement effect whenever we change a fed funds target.

MR. BLACK. I certainly wouldn't favor targeting a particular federal funds rate. I might want a band for the reason that Wayne has indicated. But I would just note that the band associated with the borrowing target did not necessitate a borrowing target as long as we had the band.

MR. ANGELL. What I'd like to see are some alternatives. I'd like to have Don present us with some alternatives that give us means of accomplishing what we wish to accomplish in ways that might to some extent be more explainable between meetings without having to use exceptions quite as much.

MR. BLACK. You know, when we were under the borrowed-- nonborrowed reserve targeting procedure, we made banks borrow half of any shortfall. There was an automatic corrective mechanism there, and we made ad hoc adjustments every now and then as needed, and I'd like to preserve that right. That's the kind of direction I would like.

MR. ANGELL. Of course, you're getting a 45-degree slope [unintelligible] function in there. We do that in part.

MR. BLACK. I'm not sure.

MR. ANGELL. You're observing part of the variance in the funds rate and part of the variance in total reserves.

MR. BLACK. Yes, if the money supply spurted, we made banks in effect borrow half of the additional reserves that they needed. And that was an automatic brake on that.

MR. ANGELL. Yes, and we could have whatever elasticity in that function we choose to have.

MR. BLACK. Well, that would appeal to me a whole lot more than what we have now, but there's not going to be a consensus on that at this point. I hope some day there will [unintelligible].

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. If we want to abandon the current operating procedures it shouldn't be on the basis that you're confusing the market because I think the market has pretty well got it straight. Analytically, we are on a modified or flexible federal funds rate approach, and the market knows that. So, it seems to me that the discussion ought to revolve around what is the best procedure; that is, whether or not something more rigid as far as fed funds targeting is appropriate--which I wouldn't be very happy about or support--or whether it should be a reserves target. But I think confusion is not the issue.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. This might be too technical as an option, but what I always thought was a possibility would be--. You know, we have an estimated borrowing function; we go through quite a sophisticated analysis to know the econometric equation that estimates the long-term relationship between the funds rate and borrowings, and it seems to me that could be the basis for establishing some sort of expected funds rate range. It seems to me that we could still set a borrowing target; however, if the funds rate were to start to vary outside the range predicted by this estimated long-term relationship, and we didn't really know why, then we ought to be more sensitive to the funds rate versus trying to hit some borrowing number. That would allow us to pursue a borrowing procedure but be more sensitive to the funds rate when we get outside that expected band. I mean, that's not money we are putting in--what Bob Black was saying--but at least there's some scientific reasoning, or rhyme, as to how we were to set the expected range. And I think that actually that's about what we've been doing.

MR. PARRY. I was going to say, isn't that what we did?

MR. JOHNSON. And I think that's okay; I'm not opposed to it.

MR. HELLER. But if you wanted to formalize that--I mean all your targets--in the directive, wouldn't you squeeze the fed funds rate clause down to 50 basis points or something like that?

MR. JOHNSON. Well, I don't know what the variants are.

MR. KOHN. I was going to say, in terms of the standard deviation of the borrowing equation, the federal funds band is much larger than we've been tolerating. It's more like 3/8ths of a percentage point.

MR. JOHNSON. Plus or minus?

MR. KOHN. [\$100 million], plus or minus in terms of standard deviations. Is that right, Dave?

MR. LINDSEY. Yes, that's \$500 [million]. Judgmentally, the Desk can come closer than that, but that doesn't [unintelligible] the equation.

MR. JOHNSON. Well, something like that; we ought to at least look at what the standard deviation is and see if that's within our tolerance.

MR. BLACK. One thing we probably can agree on is that we've been doing a pretty darn good job with what we've had; it's just a question of whether we can continue to do it with this procedure.

MR. STERN. Well, I agree with those who've observed that we are some significant distance away even now from pure federal funds rate targeting and I guess I would prefer to keep my distance from such targeting. I see a couple of reasons for that. One is to some extent the grass is always greener phenomenon. Every time a problem crops up we'd like to find a better way and I would too. I have a hunch that search is going to turn out to be long and arduous. Equally important, as you know we were pretty much committed to the federal funds rate in the 1970s. I wouldn't attribute all the problems with policy in the 1970s to the federal funds rate target, but I wouldn't say that it was helpful either. Based on that historical experience, I'd be very cautious about going back to something like that. Now, we may find a different way of implementing closer control of the funds rate if that's what we want to do. But again I think despite the problems with the current procedure, the history of the 1970s doesn't make me sanguine about tighter control of the federal funds rate.

MR. PARRY. But, Gary, isn't that because you had a rigid fed funds target? What we now have is something that is more flexible, and it seems to have worked at least over this period.

MR. STERN. I'm not complaining about current procedures, but as I said, it's a long way away from pure targeting of the funds rate.

MR. BLACK. What I was advocating here is not what we had before but a much wider band. I would be totally opposed to going back to what we had before. That and the market--

MR. STERN. I guess what I wonder about in that setting is how to adjust the band, not where we are day-to-day within it.

MR. HOSKINS. But isn't a risk of what we are doing now that the band implicitly is getting narrower and that we are heading back toward the 1970s? If you did something like what Bob Black wants to do, and maybe Tom Melzer who would tie it probably to the base--

MR. JOHNSON. But you know the reality is a point, as long as you move that point enough--that's what Bob is saying. You could have an explicit funds rate target, but if you moved it often enough to deal with the problem--. The whole issue really is whether you're willing to move the funds rate. And I guess Gary is saying that in the 1970s when this body had explicit funds rate targeting, for some reason it wasn't willing to move the funds rate enough. It was always behind. I think the question is, if we went back to that, would we be willing to move the funds rate more often? The only issue really is whether we would or not.

MR. BOEHNE. Well, there's a little more than just the willingness of people to do it. It goes to Wayne's point, and that is that a movement in the funds rate has much more than an announcement effect. And our current procedure does allow some flexibility absent an announcement effect.

MR. JOHNSON. True, but I tend to agree with Bob Parry: The market knows exactly; they scrutinize the funds rate hourly.

MR. BOEHNE. That's true, except if the market were totally logical about it, a half point increase in the discount rate ought to be just equal to a 50 basis point increase in the funds rate, and it isn't.

MR. JOHNSON. I can see that there are certain announcement effects that are similar to the announcement effects of a change in the discount rate. I think that's only because a discount rate change is viewed as an intention by the Fed to lock in the funds rate at that level and put a floor under it. So, I think that's why it has that effect--of being considered a Fed decision to make that funds rate a permanent rate and it's not going to be flexible down.

CHAIRMAN GREENSPAN. Temporarily.

MR. JOHNSON. Temporarily.

MR. HOSKINS. Well, it's not clear to me that the markets know where we are. I think the markets pick out the rate that they think we are at, and then we allow ourselves to move to that rate; that's the way I read what's going on. We figure out where they are; they keep trading the rate in a certain way; and if we don't protest it sufficiently, we finally decide, if nothing bad happens, to let the rate go to where the market sets it. That seems to me to be the way we've been operating, and I don't find that exactly a comfortable way to be setting policy. I think you ought to react to the markets, and you ought to understand what they are trying to tell you.

MR. PARRY. Well, you can turn that around a little. You go through an intermeeting period, and if things look like they are firming up for good analytic reasons, and if you allow it to firm up a little bit, what's wrong with that? If you didn't, you'd be going back to what we had in the 1970s that Gary referred to.

MR. HOSKINS. I don't understand it. We have a conditional directive, and if conditions work out that rates go up, and if the market does it before we do it, so what?

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Well, I hesitate to put this in these terms, Wayne, but every time I listen to this discussion I think it does to come down to how many angels can we put on the head of a pin.

CHAIRMAN GREENSPAN. How many can we?

SPEAKER(?). Not very many.

VICE CHAIRMAN CORRIGAN. But it is a little more complicated than that. Bob Heller, taking your point regarding problems in other countries--I just glanced at this paper--my sense of it is that virtually every central bank in a major country in one way or another is having exactly the same kind of discussions we are having here, because the fact of the matter is that for a variety of reasons there is no mechanism that is wholly satisfactory from all points of view. We see what's happened in other countries in recent years just in terms of disparities and money growth rates versus money targets and so on. I think we are all frustrated and searching for the brass ring, and I don't think it's there.

Two or so months ago Ed Boehne put this is a useful context. If I remember, Ed, you suggested that if we thought of a scale of 1 to 10 and on that 10 was a pure money target or reserve target and 1 was a firm, even more firm perhaps than the 1970's version, federal funds rate target, I think that you were suggesting at the time that you thought we were somewhere around 3 on that scale, and I think that's about right as to where we are. Frankly, I too am rather comfortable with that. I continue to have very grave reservations about going from 3 to 2 to 1 on that scale. And I say that from several points of view. There has been some discussion here about the inertia factor; it is simply the inability of this Committee or any committee to move the interest rate target enough. I think there's more to it than that because I at least think there are some major league questions in the economics of the relationship between an interest rate target and money target and other things. And again, I think Gary made a good point; there's a tendency to think, gee, we'll try that and all our problems are going to go away; quite the contrary, they won't. We will have a whole new bushel basket full of problems. And I guess it's partly in that spirit [that we find ourselves] today.

Going back to Ed Boehne's comments, I actually think that this procedure has worked pretty darn well. I think it was Governor Johnson who made the point that if anything we probably have gotten a bit more flexible, maybe a lot more flexible, and that's all right with me, too. But the great advantage over and above those that have been cited by Governor Angell, and Ed, and Gary and others about the current procedures is that it has a valuable form of give to it; it breathes; it's not rigid. I think that that character of it is awfully good from a market point of view, and I think it's awfully good from our point of view. I think that in some ways that is what distinguishes it from the extreme form of a federal funds rate target. It's the extreme form only that involves the question of inertia, but I think it inevitably can put you on a slippery slope into a regime of fine tuning that I would find very, very difficult to support. So, I kind of like what we are doing and I think we've got to be flexible

when we need to be. I think there is a demonstrated capacity for that flexibility to be brought to bear either with small things, where Peter and Don and Chairman Greenspan do it, or for big things done through the Committee. But I sure wouldn't want to change it very much.

CHAIRMAN GREENSPAN. Let me suggest a couple of other things that I think have been involved in the last year which we haven't really raised today. One is the question that I think is implicit in whether we move in incremental fashion or in discontinuous jumps. The other is: How do we know our degree of pressure is right or wrong, and how do we know whether we are moving fast enough? I think that implicitly in coming to grips with those questions--granted that our fundamental purpose is on the inflation front and granted that we have felt inadequate with respect to the money supply targets--we really have been looking essentially at the slope of interest rates. One of the reasons why I guess most members of this Committee have felt comfortable with the degree of incremental tightening that we have been involved with is that essentially we have been stabilizing inflation expectations around a rather narrow range. And there is a very extraordinary value in having that if our basic purpose is to prevent a breakout of inflation on the upside. And I think the fact that we have been looking at a stable long-term interest rate has given us a policy anchor which I suspect is not going to exist indefinitely either into this or the next cycle because I think it is a very special case which has turned out to be exceptionally helpful. I think that has been useful in that it has enabled us to function in a rather systematic way. The thing which concerns me is that in the next cycle that's unlikely to exist. I don't think there's anything involved here other than in part pure luck.

I remember that prior to the discount rate increase in 1987, in the summer of that year we did a historical appraisal of the extent to which short-term tightening either moved long-term rates up or down and the pretty convincing historical result was that when short-term rates moved up as a result of Federal Reserve tightening, long-term rates moved up. Now, one can argue that that may well have been largely the expectational factor; that is, if you're moving up incrementally, the next expectation is we will move up more and create a much higher long-term interest rate. But I do think that, in evaluating the current theory, it has turned out rather well; and, I think also our procedure has worked well but I suspect it's more because of the fact that we've had the long-term interest rate anchor. I'm a little concerned that we may overread the usefulness as a generic tool for all times and all places. And I would be inclined to come out more on the side that unless and until we can feel comfortable with the specific procedures that would be involved in reserve targeting or money supply targeting, that we probably are best suited to develop in each cycle and each period something which the consensus of the Committee feels comfortable with as an operational vehicle without taking all that seriously that there's something sacrosanct about the particular function itself.

VICE CHAIRMAN CORRIGAN. That is kind of what happened, of course, if you look at it over a sweep of 30 years.

CHAIRMAN GREENSPAN. Yes, and I'm not sure that that's wrong. President Guffey.

MR. GUFFEY. I don't think I can add anything that hasn't already been said other than to state my own position. I would oppose moving back to a rigid federal funds rate target. I think that what has happened over the last two intermeeting periods particularly has proven the worth of the procedures we've been following. And I'd also note that there is nothing new apparently in that world because this idea of broadening the federal funds range and letting the market move it within that range rather than us was a regime that we followed some 10 or so years ago when we called that area in which the federal funds rate could move on its own a "zone of indifference." I don't know whether that was a published term or not, but it was certainly featured in discussions around this table. That zone of indifference would have been set within a federal funds rate range of 2 to 3 percentage points, and no action would be taken so long as the fed funds rate moved within that zone. My recollection, Bob Black may remember, is that the zone of indifference was about one full percentage point. The point is that it has been done before. It wasn't successful then I might add, and that is one of the reasons I would hate to go back to a rigid federal funds target even with that type of caveat.

MR. JOHNSON. I'd say we are more rigid than that right now, even with the full borrowing target, even if we'd be within that.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I just had a couple of comments I wanted to add. Jerry said one of them, and that is that the econometrics aren't really there to tie the funds rate to our goals, which I think is a very important point.

VICE CHAIRMAN CORRIGAN. It's not just the econometrics; the economics worry me.

MR. MELZER. And secondly, nobody's really said this explicitly, I think Gary alluded to it, but the funds rate is a procyclical target; and that's why I feel rather strongly that if we explicitly use that target, we need some kind of a proviso that is reserve-based.

CHAIRMAN GREENSPAN. I think we've always had multiple provisos. I just can't see us ever functioning [unintelligible]. President Keehn.

MR. KEEHN. Well, while I completely agree with the procedure as you describe it, the only question I would have is how do we explain to the markets what we are doing. I have in mind your February Humphrey-Hawkins testimony. Are we doing something different that you're going to have to explain in your testimony?

CHAIRMAN GREENSPAN. What we are doing is what we've been doing, whether we defined it or not, for at least as long as I've been here. I don't know what difference we have to explain.

MR. KEEHN. Well, I would think in your testimony the aggregate discussion tends to be on the heavy side in terms of ranges and performance relative to the ranges, etc.

CHAIRMAN GREENSPAN. Not in that sense.

MR. KEEHN. I think what we are talking about is a quite different procedure with which I agree. I think we may have a responsibility to explain both to the Congress as well as to the markets that we are doing something a little bit different here.

CHAIRMAN GREENSPAN. On the other hand, we've stayed within our [monetary] target ranges which we have defined to the Congress--right in the middle--and it's likely that we don't have anything to explain.

SPEAKER(?). Of course, the explanation isn't difficult.

SPEAKER(?). We are here by accident, Mr. Chairman.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I'm afraid I have misstated my position pretty badly. I think the excellent memo we had last time demonstrates pretty clearly that there is a good relationship in the long run between M2 and the price level. And I think the price level ought to be our ultimate target. I think that's all we really ought to be targeting on. If we do that, then I think these other things will fall into place about as well as they can. That suggests to me that somehow or other we have to control the supply of money. In the short run, which is what we are talking about here now, our procedures regardless of whether we use a borrowed reserve target or a federal funds rate [range that is] narrower or wider--and I had in mind a wider one--necessitate our being able to estimate the short-run demand for money. I think that's very difficult to do. All I was attempting to say is that I think if you leave out the borrowed reserves stuff and work with the federal funds rate, we'll probably do better in the short run in doing that. But I will not be satisfied until we get to the point that we really pay a lot more attention over the long run to what's happening to M2, or if some other variable is a better predictor of the rate of inflation then that's the way I want to move. I certainly don't have in mind any rigid pegging of the federal funds rate. That to me would be nothing but a modern day version of the real bills doctrine where the market would get everything it wanted in the way of money at the particular rate we chose and all we could do to change that would be to raise the rate or lower it--which means we'll end up with a real bills doctrine, and I'm violently opposed to that. I think that doctrine has long since been discredited. And so the question really is what kind of mechanism in the short run can get us to what I think should be our long-run target or some control over prices over the long run through controlling the rate of growth in some aggregate or some reserve measure. I don't know what the answer is in the short run. We had a memo on that and it doesn't suggest the answer is very easy. But there is the sense in which I offered this recommendation of mine. And I'm afraid I didn't make that very clear.

CHAIRMAN GREENSPAN. This has been a very unusual and very useful discussion. Does anyone want to add anything or correct anything?

MR. ANGELL. Well, it seems to me that we should leave our present procedure in place until we decide on a better one.

CHAIRMAN GREENSPAN. Well, I was about to say that. What struck me about this discussion is something I had not been aware of previously. That is the sense that even though we all have different views of the way the monetary system functions and have various preferences, there is not a strong feeling of unease within the Committee about current procedures. And I guess, "if it ain't broke don't fix it." What that means I guess is that we will proceed as best we can and in the spirit of this conversation define our targets and our goals hopefully in the way we have.

MR. HELLER. Mr. Chairman, with due respect, I think the better way to describe it is that it was broke, it is broke, and we are continually fixing it.

MR. ANGELL. But we have a system for fixing it.

MR. BLACK. It's not quite complete yet.

CHAIRMAN GREENSPAN. I'm not sure it [unintelligible]. What I was saying [unintelligible] broke. If there is no further discussion on this, I think we can move on to Mike Prell's report on the economic situation.

MR. PRELL. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. It's getting a bit late and I think it probably would be wise for us at this stage to terminate this meeting. There has been a request by several of you to move tomorrow morning's schedule up from 9:30 to 9:00 a.m. Does anyone have any problem with that?

MR. HELLER. What's the snow forecast?

CHAIRMAN GREENSPAN. I don't know; let's get a Committee vote. If no one has a problem with it, why don't we reconvene at 9:00 a.m. here tomorrow morning.

[Meeting recessed]

December 14, 1988--Morning Session

CHAIRMAN GREENSPAN. Ted Truman?

MR. TRUMAN. Yes, sir.

CHAIRMAN GREENSPAN. Do I understand that Larry Promisel's going to do--

MR. TRUMAN. No, I'll do it, for whatever it's worth.

CHAIRMAN GREENSPAN. But you do have it?

MR. TRUMAN. Yes, I do have something to read from.

CHAIRMAN GREENSPAN. Well, why don't you start us off on that?

MR. TRUMAN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. We have had some softening in new orders for exports, but my recollection is that when we measure the unfilled orders that exports were rising quite substantially, which raises an interesting question as to whether this is just a temporary slowdown followed by a negative acceleration or whether our data are quite wrong.

MR. TRUMAN. Well, as you may remember the way we construct the export orders from those series is to use the staff forecast. So if the staff forecast is wrong, then export orders are wrong. Essentially, the division between domestic orders and exports orders is derived from the staff forecast.

CHAIRMAN GREENSPAN. Well, that's quite true, but the backlog is in fact independent, and at least the export orders series--which is fully constructed from the National Association of Purchasing Managers survey--is not inconsistent with the pattern of new orders, which sort of suggests that they still have got to be of significant value.

MR. TRUMAN. That's why I said that it seems to me that although these data may well be used by those who think there's going to be a stalling--if you want to put it that way--in the adjustment process, it seems to me that it's a little premature to argue that case. I might add that shipments of large aircraft in October were about double last year's, and that is one factor that we are expecting through the forecast horizon to give us some boost to the overall level of exports; that's one area where orders have been strong and they have long delivery-lead times and so in looking out it looks like you're going to have a continued boost to exports as a whole from that source.

MR. BLACK. Ted, were the September figures on CIF basis revised?

MR. TRUMAN. No, they were both revised by about the same amount.

MR. BLACK. What is it for September? I didn't get that somehow.

MR. TRUMAN. Well, revised from--

MR. JOHNSON. \$10.5 to \$10.6 billion.

MR. BLACK. \$10.6 billion, is what it is now?

MR. JOHNSON. \$10.67 billion, something like that.

MR. TRUMAN. \$10.67 from \$10.46 billion.

MR. BLACK. Thank you.

MR. TRUMAN. \$10.6 billion.

CHAIRMAN GREENSPAN. Perhaps it would be best if we first directed questions to Mr. Truman and then go back to the domestic market issues and Mr. Prell. So why don't we just stay with the international side and question Mr. Truman at this stage. Let me raise one question. In the forecast, there is an implication of a fairly significant slowing down in the adjustment process. It's of a dimension which suggests to me that it's got to be a month or two of very poor numbers, which is going to create the usual concerns. I would assume that in that type of an environment that the market will probably be moving the exchange rates down to your forecast. I don't know whether or not that's sort of implicitly assumed in your forecast process, or whether or not your forecasts on the exchange rate have essentially been straight lined down and you calculate it from there, whether you try to get a little more dynamic into it.

MR. TRUMAN. The answer to the last part of your question is we find it hard enough to try and come up with "forecasts" of an exchange rate that we don't try to put a dynamic in.

CHAIRMAN GREENSPAN. I don't know why you have difficulty. No one else seems to!

MR. TRUMAN. I think there is a risk in that, since in the staff forecast the trade balance improvement essentially levels off in 1989. That is to some extent exaggerated by the impact of the somewhat higher oil prices that come in. So, there's a little bit more improvement ex-oil in the forecast. The market presumably will look through that part of the forecast that we have in the total numbers. But as I think we mentioned in the Greenbook, it does strike me that if you wanted to fine tune things you might feel that this stalling, if you want to put it that way, or partial stalling in process could lead to pressures on the exchange markets in the short run as the markets adjust to that. Factors behind this essentially are two. One is the strength of the dollar this year and the other is the fact that, at least in our forecast, we have a slowing of growth abroad in 1989 which should give us less [impetus?] from that standpoint. In 1990, the forecast gains from essentially the cumulative effects of the relatively small appreciation of the dollar that's in the forecast and a slowdown in U.S. demand.

CHAIRMAN GREENSPAN. The reason I raised the issue is that I was looking for some [potential] shock to what is a remarkably smooth econometric forecast in the Greenbook, which of course of necessity has always been good. This strikes me as an area where you can get some destabilization from something cracking in the seams. And I was just curious to get a sense of the order of magnitude at which it would be a problem. In other words, I assume that if anything were to happen, we are looking at, say, a 10 yen adjustment as distinct from the 25 yen.

MR. TRUMAN. Well, if I were to guess, I would guess that way. I think it would also depend on what else is going on at the same time. If you have a slowdown in the trade adjustment but progress--whatever that means--or perceptible progress on the budget deficit, that might strengthen the dollar. If the U.S. economy seems to be slowing down a bit, that might also tend to offset some of the effects of an adjustment to somewhat disappointing trade numbers. But I think a lot depends on what else is going on at the same time.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. One thing that bothered me a little about the forecast when combining the international side with the domestic side is that--I understand the point about the slowing of the trade adjustment and the expectation of some dollar depreciation--but I'm having a little trouble understanding how that's consistent with our interest rate projections in the forecast. We've gotten into this before, but we are talking about a fairly substantial increase in short-term interest rates over the next year or year and a half, and yet there is dollar depreciation. My question would be that I don't see those as quite consistent, unless you're arguing that our foreign counterparts move their interest rates in a parallel fashion. So, I just wonder what kind of assumption you've got in there.

MR. TRUMAN. On that particular point, we have an increase in rates abroad, but not on the same order of magnitude--maybe half or a little bit less than half of the increase we have for the U.S. So you do have interest rate differentials moving in favor of the dollar. And as you know, there is I think in this area [a question of?] how much is enough, if you want to put it that way. I think it's a matter on which science doesn't provide us much guidance. One reason why we tended in this forecast to slow the rate of depreciation of the dollar relative to the overall contour that we had in the previous Greenbook was in fact the recognition that somewhat higher rates of interest that occur in this forecast, at least in the short end and the same kind of stuff for the long end, tend to damp the tendency for the dollar to depreciate; the depreciation we would argue would be much larger in the absence of that. We have the effect in the forecast. The question is whether we have it calibrated right. Some would argue, as you know, that a forecast like this for interest rates would bring about even more in the way of stability of the dollar than we have. [unintelligible]

MR. JOHNSON. I can understand that scenario if foreign rates were keeping up with U.S. rates, but I guess my next question would be that if that's not the case, then I have some doubts about the exchange rate scenario in the Greenbook. But if it is the case, then I was going to ask what we have built in for foreign demand?

MR. TRUMAN. We have a fairly sharp decline in the rate of increase in demand abroad--down to something like 2-1/2 percent from the somewhat over 3 percent rate on average for the G-10 countries this year. That is one factor affecting things the other way. Now, I think you have two scenarios. You have the scenario of 1988 where you had a relative increase in U.S. interest rates on balance through the year and approximate dollar stability. On the other hand, you also had 1987, where you had a relative increase in U.S. interest rates and a fairly sharp dollar decline over the period. So, I don't think science, if I can put it that way, [unintelligible].

MR. JOHNSON. But I think part of the reason for the 1987 decline was that rates were moving more sharply abroad than they were here.

MR. TRUMAN. No, there was a relative increase in U.S. interest rates over that period. But the issue I think really is where the market in some sense expects the equilibrium for the external accounts is, looking out to the long run. I don't think there's a strong--; you have views all over the map, from some saying the current account has to go to zero to ones who say we can live with a current account of \$100 billion or so. I guess what has driven the staff forecast for exchange rates for a number of years now has been the view that it's not going to have to be one way or the other--that the current account while not necessarily having to go to zero is not going to be a deficit of \$100 billion, which strikes us as a fairly big number to finance, and so forth and so on. And I think then the issue is the tradeoff between how much of that comes through price effects and how much comes through income effects, and to what extent somewhat higher interest rates in this country will work against the sort of underlying forces which are tending to drive some of this adjustment through price effects. The best we can do is to provide some rough thinking on the matter without a lot of precision, because I don't think there's a lot of precision here. Now, what we basically have built into this forecast is a 6 percent decline of the dollar from roughly where it is today at an annual rate. That translates to somewhat less than 4 percent in real terms. That's a relatively modest decline by the standards of recent years. The rationale for the modest decline is the fact that we do have U.S. interest rates moving higher. And it may be that you'll get another 1988 in 1989 as a result of this kind of forecast. At least on our modest equations, or whatever you want to call them, you're going to get a somewhat different outcome on the external account, and that is in fact where the [uncertainty?] is; you might as well call it that, too. I mean there are some forces in the economy also coming from the decline of the dollar; perhaps you would have less impetus in 1989 and also in 1990.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Ted, when you talked about sluggish exports, you didn't mention anything about capacity constraints. My impression from some work one of our people did is that in key export sectors we are still in pretty good shape on the capacity side--electrical machinery, non-electrical. Is that your impression?

MR. TRUMAN. Yes, that's certainly our impression of what we have seen. There have been some stories at some point in some areas,

but the few areas where there seem to have been capacity constraints seem to have eased off a touch since last spring. I confess we haven't been systematic in collecting information on that, but I've seen some.

CHAIRMAN GREENSPAN. I think the steel industry is the only sort of [unintelligible]. I assume that they could ask for a lot more if they had the capacity and orders, real or imagined.

MS. SEGER. Keep their import protection.

CHAIRMAN GREENSPAN. Yes. President Parry.

MR. PARRY. Ted, it seems to me that the export numbers really are quite strikingly strong--\$65 billion I believe in 1989 and \$56 billion in 1990. My impression is that relative to what one would get in a model forecast like the MPS, it's a very strong number; and I was just wondering what kind of things would enter your judgmental forecast to get that kind of strength, particularly given the slowdown in GNP that you're expecting among industrialized nations in 1990.

MR. TRUMAN. Well, as I've said, 13 percent rates of growth in value terms are not anything to sneeze about. We don't actually use the MPS model for this kind of relationship, so I'm not quite sure I can articulate--. And that model has for quite a long time tended to give a different picture for the external accounts than used directly in this process. One big issue has to do with how you treat computers, and whether you sort out computers from your equations. We have recently found it necessary in our forecasting to do that and then we sort of independently have to estimate what we think can happen to computers. That is one area where we have trimmed back the forecast relative to where it was a couple of Greenbooks ago. Excluding computers from our model, given the kind of equations that we have, we would have in fact slightly stronger volumes of computer exports [implied] from equations that we are currently using. I mean, that difference--between 8, 8-1/2, or 9--that's the sort of thing, looking at the fourth-quarter changes. We are roughly consistent with that. Some of the slowdown does come from the total--

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I think your response to Governor Johnson's question is really a most interesting one. But as I understood your response to the Chairman earlier, you did not indicate the dynamic of the exchange rate adjustment. And so I presume you believe that if the interest rate increases were to come somewhat earlier and if possibly the economic slowdown that you have in 1990 thereby might occur, that the exchange rate adjustment might possibly be more inclined to occur during the period of slowdown than in a period in which we might have a disinflation or some commodity price deflation scenario. Would you agree that that's one possibility?

MR. TRUMAN. That certainly is also a defensible scenario: that you will get less exchange rate adjustment in 1989 despite the slowdown in trade adjustment and more in 1990 if it appeared that the economy was itself slowing down and you were having some lessening of price pressures. That's one of the reasons why we end up straight lining it. If you get too fancy--

MR. ANGELL. So if the Committee, as the staff has interpreted it, is very serious in regard to inflation prospects and if that would then cause us to move interest rates somewhat more in the earlier portion of the two-year period, then it would, it seems to me, be possible that the exchange rate adjustment might take place in an environment that would be much different than for an exchange rate adjustment to take place in the current environment in which inflation is such a potential.

MR. TRUMAN. Yes, it's possible.

CHAIRMAN GREENSPAN. Vice Chairman

VICE CHAIRMAN CORRIGAN. I'll just take the other side of that for a minute. If you look out at 1990, I think the 'Catch-22' can be even sharper in the following sense. It is not at all difficult to stipulate a set of conditions involving a stable exchange rate at current levels, rather than a modest decline and a combination of relative U.S. and foreign economic growth. That would yield a situation in which the external adjustment not only stops, but it reverses by the end of 1990. I don't necessarily believe that, but if you went through a conventional exercise using conventional, and historical, estimates of the various elasticities, and so on, it's not implausible.

CHAIRMAN GREENSPAN. That's what the IMF and OECD [unintelligible].

VICE CHAIRMAN CORRIGAN. It's not at all implausible to end up with a result in which, as I said, by the second half of 1990 you have the current account and the trade account deficits actually increasing. I have a great deal of difficulty accepting that view for a variety of reasons, but if you really want a Catch-22 to contemplate, that's it.

MR. TRUMAN. It's difficult to run these forecasts when you have different assumptions, but based on our conversation over the weekend, we did run a forecast in which nothing changed except the exchange rate path. Now, just as you may ask how do you get the exchange rate change, you can also ask how you get nothing changing but the rate. But for whatever it's worth, what we get on the current account under that scenario would be essentially no change in the current account, essentially flat at about a rate in the \$110, \$120 billion range. However, we do continue to get improvement, but at a smaller rate, on the trade side. And you essentially are in the situation in which the trade improvement just offsets the deterioration coming from the interaction of the higher deficits themselves and the higher interest rates which tends to deteriorate the current account. So, you get some trade balance movement over that period, but you would not get any current account movement.

VICE CHAIRMAN CORRIGAN. I'm a little skeptical that the kind of historic relationships--which we implicitly assume--are going to be valid for 1989 and 1990. And as a result, I look upon that type of scenario with a lot of skepticism. But the fact remains that there are a lot of serious people who look at it as a quite realistic possibility.

MR. TRUMAN. Well, as I said--

CHAIRMAN GREENSPAN. Most of the academics come out exactly [unintelligible].

VICE CHAIRMAN CORRIGAN. It gets pretty ugly.

CHAIRMAN GREENSPAN. The question is you have to [unintelligible] to get elsewhere.

VICE CHAIRMAN CORRIGAN. If they are right.

MR. JOHNSON. I think it's more likely than not that the trade balance is not really compatible with our inflation goals. It would not surprise me at all if we are left with a fairly large trade deficit by doing the things we need to do to keep inflation down. But that means there's a big structural problem and that's really the case. You have a big savings-investment imbalance worldwide and that's basically it.

VICE CHAIRMAN CORRIGAN. I'll put it in its most graphic terms. If Marty Feldstein is right, what would ultimately happen under those circumstances is that even with relatively high [interest rates, there] would be a major and possibly highly disruptive fall out of bed of the exchange rates.

MR. JOHNSON. I don't want to focus on the dollar entirely, but the conditions under which you get that--; I don't think just running a large trade deficit is going to do it in and of itself if we maintain a policy that keeps inflation down. But the other side of that is that the trade numbers aren't going to improve either.

MR. TRUMAN. Well, maybe we might emphasize one of the basic rationales for much of the forecast, which is this view that we have of the Committee's view about what it wants to do with inflation. Now, it also is true that we've done this with a modest exchange rate change and some degree of continuing progress--as a result of that in the real exchange rate change--in the trade and current accounts, obviously. Now, if you could change that equation a little bit so that you didn't have an exchange rate change, it's also true that in some sense you'd have a more favorable inflation outlook over this period because you wouldn't have quite the kind of [inflationary] pressure coming from the new exchange rate change over the forecast period. In that sense, there is a connection between the two parts of the forecast. Whether we got the balance right either on the domestic side or the domestic-external side I think we need to be humble about. But the exchange rate change in and of itself--the one that's built in here--does bring you, if you want to put it that way, further improvement on the external side and not runaway inflation. So, in that sense you're not bumping capacity constraints. That's partly because the rest of the economy is squeezed to the extent that you allow the external economy adjustment to continue.

MR. JOHNSON. Well, it may be possible to have a financeable current account if it's consistent with keeping the inflation rate level. I'm not saying that's not possible, I'm just saying that's a close call. But I don't know anybody that's saying we can get balance in a short period that's consistent with that.

CHAIRMAN GREENSPAN. Well, the next stage of financing if we run into trouble and we are [unintelligible] are "Bush bonds." You know, we've got a huge capacity to finance with foreign-currency securities. We can finance this deficit almost indefinitely, if we want to create a huge exposure on the exchange account. We haven't even started in that area.

MR. JOHNSON. Well, I'm thinking about stable financing. I agree that it's possible. Central banks can finance the whole thing for a long, long time. It's just not consistent with a lot of other stability.

VICE CHAIRMAN CORRIGAN. That I imagine.

MR. TRUMAN. Well, I guess you could look at this forecast that we have and argue that you worry about how much of an adjustment there is in 1989 for various reasons, as the Chairman discussed earlier. But, actually, if you look at the total adjustment on the external side over the period where the trade balance essentially declines by \$45 billion and the current account declines by about another \$30 billion so that you're down to a \$70--\$80 billion dollar range for those two by the end of 1990, that I think is not an unattractive situation.

MR. JOHNSON. I agree with that.

MR. TRUMAN. Among other things, you could even argue that at that point the system could self-finance, if you want to put it that way, without needing added inducements. Also, once you get the trade balance down a bit, you don't have this great discrepancy between exports and imports. The growth differentials [unintelligible] but still have it working there, but not on the same order of magnitude as when imports were over three times the size of exports for a while.

CHAIRMAN GREENSPAN. Any further questions for Ted?

MS. SEGER. What are you assuming on the exchange rate situation with regard to the NICs? You know they haven't necessarily followed the weighted-average G-10 that we [unintelligible].

MR. TRUMAN. Well, this year in fact they've done better--or worse if you wanted to put it that way.

MS. SEGER. Starting in 1985?

MR. TRUMAN. That's right. We are assuming that there will be a continuing depreciation vis-a-vis those currencies but at about half the 4 percent rate in real terms to more like 2 percent in real terms.

MS. SEGER. And the second question I have is for those people who argue that slowing our economy will help our trade deficit. Have you run a recession through your models to see what that does? If slowing is good, then recession must be terrific, right?

MR. JOHNSON. Does wonders for the trade account but--

MS. SEGER. Yes, that's what my question was.

MR. JOHNSON. --bad for the budget.

MS. SEGER. No, I'm talking about the trade [unintelligible].

CHAIRMAN GREENSPAN. It depends on what happens abroad.

MR. JOHNSON. Yes, that's true.

MR. TRUMAN. Well, I think one can distinguish between running a recession, which doesn't really buy you very much because you come out of the recession [at a lower] level of income and later come back to the same level of income as before, so you've just bought us a lower financial cost of imports during that interval. I would think between that case and essentially the case that's implicit in the forecast here, which is that the slowdown in growth is essentially a device that is consistent with slowing the rate of growth from something like 3/4 to 1 percentage point above what we think is growth potential to something more consistent with growth potential, and in the meantime dipping down below [potential]. That is, I think different, and you get something from essentially that percentage point, or a little bit more, lower growth than what you had with the economy running along at 1/2 percent [higher] growth.

MS. SEGER. I wasn't talking about comparing recession to what we have now, I'm just saying comparing a slow growth forecast with an honest-to-goodness recession.

MR. TRUMAN. Well, an honest-to-goodness recession would help in the short run. But I think when you come out of the recession and you get back to where you start from, it's not clear to me in terms of the external accounts themselves that you really have bought yourself very much. If you want to prolong the recession for an extended period of time, then you might get something.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. Are there any questions for Mr. Prell?

MR. PRELL. Thank you.

MR. FORRESTAL. Not yet.

MR. BOYKIN. Could I?

CHAIRMAN GREENSPAN. Oh, by all means. I thought you were pointing to your colleague.

MR. BOYKIN. One thing back on the price of oil and the way it's figuring in, you were saying that you are now looking at a \$2 to \$2.50 increase in the price of a barrel. At a recent meeting, I guess it was October, we were looking for a decline and it seemed that energy was a fairly significant factor in the inflation outlook--that is, a better outlook for inflation. And now that has kind of come back around to where we've been running \$15+ a barrel. As I understand what was said, it doesn't seem to have the same adverse effect on inflation on the upside. Am I misunderstanding something here?

MR. PRELL. Well, we went down on our oil price assumption for the November meeting. At that point we had consumer energy prices falling about a percentage point from the fourth quarter of this year to the fourth quarter of next year. Now, we have consumer energy prices rising almost 2 percent from fourth quarter to fourth quarter. That largely reverses the change we made last time, puts us back in roughly the same territory as we were in the meeting before last.

MR. ANGELL. But, Mike, you also have some adjustment on the food side, though, that offsets that do you not?

MR. PRELL. We have a little lower food price forecast than we did last time.

MR. ANGELL. And that's why the change in oil doesn't then show as much worsening effect this time.

MR. PRELL. The net is a plus on the inflation rate. We just have a very slight slowing fourth quarter to fourth quarter from our last forecast in consumer food price inflation. We got a little bit better performance recently and so the fourth quarter of this year has been knocked down a couple of percentage points on consumer food price inflation.

CHAIRMAN GREENSPAN. Any further questions? Mr. Melzer.

MR. MELZER. I was afraid, when Bob was introducing me here, that I had better come up with a question. Mike, you mentioned that in looking at the 1990 forecast you had not attempted to project any potential shocks. The Chairman had mentioned one in terms of the currency shock. If you had to list the likely candidates, what kinds of shocks would you think about in that context?

MR. PRELL. Well, there are shocks, if you want to call them that, the nonsmoothness that might arise on the real side. For example, on the inventory side of this forecast we have a rather smooth course--a little bit of a rise in inventory-sales ratios, but mild and very smooth. And in essence we have businessmen recognizing fairly promptly this slowing in the pace of sales and tapering down their inventory investment. Historically, things have not normally moved with such precision, though in this cycle we've been impressed with the rapidity of inventory adjustments through production adjustments when inventories might have piled up [unintelligible] in that very early stage in 1983, early 1984. So, there may be reason for optimism, plus what seems to be a rather cautious attitude that businessmen have looking ahead at this point. So, that would have to be one possible disturbance.

Now, there are things that could happen on the financial side; exchange market developments, bond markets, stock markets that could create gyrations in wealth and cost of funds that make a more irregular path than consumption and other spending and then in turn give rise to inventory problems and so on that gives you a little more irregular path. Then there are those risks that one has to recognize as being associated with this kind of rise in interest rates and decline in profits--that in the nonfinancial sector, business finances could deteriorate. We would expect in this forecast a substantial deterioration in interest coverage. And everyone is mindful of the

LBO situation and what that in turn could lead to, if there are firms [that] fall into some problem and lenders who might react to what they see as the emerging risks in lending to nonfinancial customers. That could have some effect beyond what we are anticipating. And of course the thrift industry situation deteriorates substantially in this picture. The earnings will be deeply negative, will be even sizably negative for the currently solvent institutions who have the smaller interest rate gaps. For the insolvent ones, with their larger gaps, this just exacerbates their problems. So, whatever risks there might be of some liquidity problem arising from a wide loss of confidence and [unintelligible] in thrift institutions, it's awfully hard to calibrate what kinds of real side effects there would be to that kind of development.

MR. JOHNSON. I'm just following up on what you said there about the thrifts and another possible shock, and this is probably more for Ted, but this interest rate scenario raises questions about the LDCs. How do we see that?

MR. TRUMAN. [Unintelligible]. For those countries who have IMF programs, the modification of the compensatory and contingency financing facility, as it's now called, essentially allows them to build an adjustment factor into the size of financing they get from the Fund for rises in interest rates. It does provide more of a cushion in this area than a year or so ago. But the rise in interest rates no doubt will be an excuse used by those who want to take an unorthodox approach to these matters. On the other hand, a number of the representatives of these countries have also argued that they want to make sure that the North gets its house in order so that they can [not?] have it both ways.

MR. JOHNSON. Well, what about this recent BA meeting? What did you make of that?

MR. TRUMAN. Well, I only know what I read in the newspapers, which suggested that they are exploring various options, none of which struck me as particularly novel in terms of the things that they like to protect, facilities or various [unintelligible].

MR. JOHNSON. The only things I saw there were things like the headline that they agreed to work in unison this time more than ever in the past and that they [unintelligible].

MR. TRUMAN. Well, my understanding of that meeting was that, although it is fair to say that these countries have been comparing notes fairly actively over the last several years, they were even more actively comparing notes [this time]. There is no desire on the part of each country to lock itself into the strategy of the other [unintelligible].

MR. JOHNSON. I guess the question is, though, what happens under this scenario. I'm just sort of asking.

MR. TRUMAN. Well, on the other side, we have a rise in the trade and current account deficits of the Baker 15 countries, if you want to put it that way, and they were forecast largely because of the rise in interest rates--though in some sense the interest rate rise is not that much different from what we've had before. It has not been

changed that much, and the issue is whether those larger deficits can be financed. If they can be financed through official or private channels, then the rise in interest rates in and of itself is not enough, it seems to me, to spark a conflagration. Lots of things could spark a conflagration, and if one occurs there will be a number of suspects, as Sam Cross said.

MR. JOHNSON. What I'm trying to draw out of you is a possibility of a shock. If there's some sort of consortium in this situation and either a moratorium or something like that, what could be the interbank market effects of that? That's a potential shock I think we ought to be aware of.

MR. TRUMAN. Yes, it would be a shock but I would think that the implications are likely to be less than they were 3 years ago and 6 years ago. Depending on how one classifies Brazil, for example, you have 45 percent of these countries--assuming Brazil has not been paying interest in the sense that the banks have not been taking in income for 2 years now but just now are able to do so. In that sense, you have for the Baker 15 countries about 40 percent of the bank debt of countries that have not been paying service in terms of interest. Taking Brazil out, it's more like 18 percent. But in some sense, the shock of giving up another 25 percent of that or 30 percent of that, if you want to put it that way, leaving just a handful of countries like Columbia and Uruguay etc., I think the shock would be there but it's not going to have a major impact. It's a risk, there's no doubt that it's a risk, but if you're looking for things to change the climate of opinion, as Mike was saying earlier, that certainly is one of the ones that could do so.

MR. PARRY. Mike, would some of the more recent numbers that you've gotten in the last week or so cause you to revise up the fourth quarter at all? Retail sales and I don't know if you have the business inventory numbers or you will get that later--

MR. PRELL. We don't have them yet; we get them later this morning. But I think the main pieces of data we've had, which are both very noisy series, are retail sales and the trade figures. As I noted, retail sales were a shade stronger than we anticipated. Ted noted the trade data looked a shade weaker without knowing the prices that go with them and all of that. On balance, it doesn't look like a substantial difference.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mike, in looking at the staff forecast in the Greenbook, it is difficult to know what you are projecting in terms of interest rate levels and when changes in those would take place. It would make quite a difference, it seems to me, as to what one might think would happen if, as I believe you said yesterday, you are looking at a 2 percent rise over a 12- to 18-month horizon. Do you have in this forecast much of that coming early on, or it is on out?

MR. PRELL. The rise is pretty steady. But again, it's somewhat the same story as Ted described with the exchange rate. We don't have any particular impressions about what the optimal quarter-by-quarter movement would be nor what would be plausible to assume the Committee would want to do at various stages. But we assume that the

movement begins promptly and is significant over the next half-year and fairly steady into early 1990.

PARRY. Then it flattens out in 1990?

MR. PRELL. Then it flattens out. All of the rate increases occur by early 1990. And you can perceive the hint of this in our real forecast in that the most interest-sensitive sector like housing is beginning to level out by the end of the year. Our notion is that we are not trying to drive the unemployment rate up toward 7 or 8 percent in an effort to slow the inflation, that a more modest softening of the economy in terms of resource utilization levels is needed, but our design is that you want to get there fairly promptly so that you begin to turn the corner by 1990. Many different paths could be described; and, as Governor Angell suggested, if you went sooner with large interest rate increases, we presumably would anticipate, all other things equal, a slowing of the economy more quickly and an opening up of that degree of slack that we perceive to be needed.

MR. GUFFEY. Just to follow on, Mr. Chairman, I would like to request that the staff, if they are going to build a forecast on projecting interest rate levels in the period ahead, that those be explicitly stated in the Greenbook so that we can have some feel when we run the model or make those judgmental changes, how we might compare with the Greenbook. It would be very helpful if there were explicit indications in the Greenbook of what those assumptions were.

MR. ANGELL. I can understand the advantage of that, but it seems to me the disadvantage is that puts staff in a position of almost telling us what our job is. And I think being that explicit has its disadvantages for the work of this Committee, even though I can understand why it would be helpful to Reserve Banks.

MR. HELLER. Just on that point, that's why I would be in favor of having alternative forecasts. One with, let's say, the interest rates going up and one with a different policy forecast. So, then you can really tell it apart, and I think that would fulfill what you wanted.

MR. GUFFEY. Yes, indeed it would.

MR. HELLER. And I think it would help a lot with making the proper policy judgments you want to make.

MR. GUFFEY. As a matter of fact, I think that's the way it used to be done; [an assumption of] no change in policy.

MR. PRELL. No, not in my decade of memory of this. And I think, Governor Heller, we have attempted on many occasions to present this at the Committee meeting. There are many questions that arise in terms of what should be put in the Greenbook, in part recognizing that this document goes outside of the Federal Reserve. But you know it's up to the Committee and the Chairman to tell us what--

MR. HELLER. Well, I would think it's a lot less damaging if you've got three different forecasts out there rather than having one, because any outsider can say now that here is the Federal Reserve

forecast. Otherwise, he just has the policy options, and he still doesn't know which one is the right one.

CHAIRMAN GREENSPAN. Well, if I were on the outside and I got hold of a book which had three forecasts in it and had interest rate numbers projected against it, I wouldn't have any trouble figuring out what the Federal Reserve forecast was.

MR. HELLER. Well, but not everybody is as smart.

CHAIRMAN GREENSPAN. Nobody's that dumb! Let's discuss that internally. There is another issue here: If we started to circulate [a document] with numbers on interest rates on them and it ever got out to the public, the implications of that would be beyond comprehension. This Greenbook is a confidential piece of paper. If this got lost on a train and somebody read it, it would be embarrassing but it would not be damaging, certainly not beyond the immediate FOMC meeting. But I would be very nervous about a piece of paper circulating outside the Federal Reserve with numbers on interest rates on it and "Federal Reserve Confidential" stamped on it. That would create problems for us for months on end. But I'd like to address the concern that President Guffey raised, because I think it's quite a legitimate one and I think we'd better address it. But let's see if we can find a way to resolve this question without getting on the edge of circulating pieces of paper outside which--

MR. GUFFEY. It could be done orally, Mr. Chairman.

CHAIRMAN GREENSPAN. Well, I'm saying that may well be--

MR. GUFFEY. Staff to staff.

CHAIRMAN GREENSPAN. The question really is, is this something you need prior to coming to FOMC meetings?

MR. GUFFEY. At least--

CHAIRMAN GREENSPAN. Let's see if we can come to some solution on it. It is not a simple issue, as we are well aware. President Hoskins.

MR. HOSKINS. Well, my comments are really along the lines that have just developed here, which would be a notion of an alternative forecast or two. It's not because there's anything wrong with this forecast; I happen to think it's a very good presentation, particularly looking out to 1990 and trying to address inflation expectations and the rest of the problems that I think all of us are concerned with. So, I would be in favor of some kind of way to look at alternative forecasts. I'd like to know, for example, if you've run the model and you've looked at the 1990 inflation rate under alternative interest rate scenarios. We've got to know what the price might be to get a 1 percent reduction, say, in the inflation rate.

MR. PRELL. Well, let me be slightly defensive on this, though I probably shouldn't be. We have presented alternative forecasts--

MR. HOSKINS. I know you have.

MR. PRELL. --a number of times. And the message is the same every time, and I think you all know it and I communicated it in a rough way yesterday. So, you are not going to get revelations each time we do this. And I have a feeling that the information we've been providing is being somewhat slighted in this discussion. We have on several occasions in the past year presented alternative forecasts, quantified the effects of different interest rate assumptions and so on, and you will [continue to] see the same thing unless our general perception of how the economic system works changes each time we do that. So, there are going to be very rapidly diminishing returns.

MR. HOSKINS. I don't think you have any need to be defensive. I think the Committee generally has complimented the staff on doing those. It's just that if you were to put out a new one, like for 1990, I think it might be interesting just to refresh us as to what that would be.

MR. TRUMAN. If I may join Mike, one of the problems this time is that this forecast normally would go to 1990 in February and would be done in conjunction with a chart show. We thought we were doing the Committee a favor, if I can put it that way, by adding 1990 in December rather than waiting until February.

MR. ANGELL. It's appreciated; it's appreciated.

MR. TRUMAN. And the task of doing that and combining alternatives with it would be more difficult than otherwise.

CHAIRMAN GREENSPAN. Yes, we know.

MR. TRUMAN. We would intend when we go to 1990 in February, as we've always have done in the 15 years that I have sat around this table, to have alternatives in the chart show.

MR. HOSKINS. Fine. And I don't think any offense should be taken at these comments. I think in general the staff has been very candid about their interest rate projections. At least, we didn't seem to have much trouble ferreting out--

CHAIRMAN GREENSPAN. You know, there's also another problem with this. Sure, you can say let's just re-run the model with the lower interest rates--

MR. HOSKINS. Yes, that's the second [unintelligible].

CHAIRMAN GREENSPAN. The only problem with that is that there is no such thing as re-running the model with one change. The real art of running a model, as I think we are all acutely aware, is what you do with the add-ons, how you play them. This presumption that you've got an econometric structure which is pristine and captures the economy--one that never changes--is terrific for something, but I haven't a clue as to what.

MR. HOSKINS. Can I finish up with this one? After that, I'm not sure I should venture back out here again! The model by its nature, and I guess the Greenbook as well, works off of an issue I raised before, which is kind of a [unintelligible] notion or a GNP gap notion. There is an alternative way to look at this where we don't

have to say that 2-1/2 percent is the historical real growth, and therefore not an inflationary real growth rate, and therefore anything other than that generates some inflation. We don't seem to be trying to take account, or perhaps we don't have the ability to take account, of changes in expectations about Fed policy or the credibility of Fed policy. So, I'm a little disturbed when we look at resource availability as the only way to get at inflation. I think we don't have a very good handle on that. Some of us might have tightened very aggressively if we believed the actual [full employment] rate was 6 percent, which many people believed a year or two ago. And it looks to me like we might have had a positive supply shock; we've got more labor at the same wage rate than some of us would have anticipated. So, I'm just looking for ways to try to look at it without using the traditional method.

MR. PRELL. I guess we are questioning your interpretation of this year's events, so there is room for alternative interpretations. Basically, we've seen a substantial acceleration of compensation this year as the unemployment rate fell below 6 percent. Now, we are not taking a rigid view that the NAIRU is 6 percent in this forecast; far from it. But I guess this is an issue that certainly comes to the fore as you look at the experience of the past year. As to alternative years, you're quite correct that fundamentally we are taking a sort of short-run Phillips curve view of the world. One of the reasons that alternative forecasts got presented with diminishing frequency over the last half dozen years or so was the fact that the Committee frequently said that these are not very meaningful because they are based on this kind of wage-price structure, and we will get much better effects because there will be Fed credibility and so on. Now, what we find in actually looking back at the experience of the last several years is that the sort of short-run Phillips curve formulation of expectations built into that works fairly well in explaining the wage-price deceleration we've had without any obvious add-on of credibility. We have experimented, and we are trying to develop an econometric representation of more forward-looking expectations. Most of the rational expectations models have been constructed on very small non-structural models. We have tried to work with what resources we have to build a fuller model that has a more rational expectations sort of sense to it. At this point we really don't have something we can implement. But there's always a proviso you would say in this: that this is how things would turn out if we had the structure right, and if there were credibility effects you could get a bigger payoff for monetary restraint without the real side damage.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. Yes, I need help in the housing area, and this sort of ties into the issue of alternatives. You have housing starts, if I'm on the right line, going from 1.4 million this year to 1.43 then down to 1.36 million in 1990 with a fairly significant amount of monetary tightening built into these numbers. I know when you talked about different scenarios before, you had housing as one of the more interest-sensitive industries and therefore one that would respond most dramatically to tightening. So, when I looked at these, I really wondered if you had enough of a decline; or looking at it another way, I wondered, if interest rates were to stay where they are now, if housing starts would rise?

MR. PRELL. No, we don't think so. Not certainly from the 1.55 million housing start level we saw in the most recent month's data. We have what we think is a reasonable decline in housing starts given our assumption that mortgage rates will be rising from the current 10-1/2 percent area to something between 11-1/2 and 12 percent by early 1990. This is not an exotic movement in terms of the models that exist. It's not just the mortgage rate that would be working against housing starts in this forecast. By 1990, the slowing of income growth begins to become a significant factor, and so we do have a fairly substantial decline, particularly in the single-family sector. Basically, looking at the demographics and the damage that's already been done in the multifamily area, we think that the single-family side is likely to be hit fairly substantially over this period.

MS. SEGER. So, you don't think we are vulnerable here then?

MR. PRELL. Well, there is a substantial range of uncertainty around every number in this forecast.

MS. SEGER. Yes.

MR. PRELL. This is not a very high number--in the area of 1.35 million starts--that we have in 1990. It's not as low as we saw at the depths of the last housing downturn.

MS. SEGER. I hoped that you remembered that.

MR. PRELL. But you'll recall how high mortgage rates were at that time.

MS. SEGER. Yes.

MR. PRELL. So this seems reasonable to us, obviously, or we wouldn't have written it down. But there has to be some confidence interval around it.

MS. SEGER. Thank you.

MR. ANGELL. What would happen in 1990, just taking the opposite view, if mortgage rates rose only 50 basis points while short-term rates were rising 200 basis points?

MR. PRELL. That's a good question.

MR. ANGELL. Well, what would that do to 1990's path?

MR. PRELL. The question is why does the real rate only rise that much as the short rate is rising. If it is because of an expectational effect wherein the marginal efficiency of investment in a sense shifts, people perceive there is weakness ahead, they pull back, and they don't want to sell bonds to finance investment and housing construction or whatever; you might have in essence the same real outcome for a downward sloping yield structure. So, I guess it really depends what the circumstances are that produce that interest rate environment.

MR. ANGELL. Well, certainly, we wouldn't be in control of those rates. Now, I suppose the manner and the timing in which rate increases might take place might affect [the outcome].

MR. PRELL. The more you surprise the markets with restraint in the short run as you're suggesting, the greater, I would think, [the probability that] you are going to get some adverse effect on the bond market in the short run. But you're probably more likely to generate in due course more of a downward-sloping yield structure as people's expectations of future economic strength and credit demands are weakened.

MR. ANGELL. Thank you.

CHAIRMAN GREENSPAN. If there are no other questions I think we can start on our Committee roundtable. Ted.

MR. TRUMAN. Can I just correct something which I said before--and I'm sure no one on the Committee remembers what I said--but I have now looked at the trade numbers in a little more detail, and I want to correct one thing that I indicated. I think I said that non-agricultural exports had declined between September and October, and looking at the numbers a little more closely, I apparently had not adjusted for the fact that there was a rise in aircraft shipments. And if you include that, non-agricultural exports in fact rose or were essentially unchanged between September and October.

CHAIRMAN GREENSPAN. Your concept of non-agricultural is now nonag and non-aircraft?

MR. TRUMAN. And non-aircraft, right. Also, there is a slight rise in those exports from their average for the third quarter.

CHAIRMAN GREENSPAN. Would somebody like to start us off on the round robin on the Committee members' positions on the economy?

MR. FORRESTAL. In the absence of anyone else volunteering--

CHAIRMAN GREENSPAN. Well, I'm relieved. The silence couldn't go on forever!

MR. FORRESTAL. Looking at the Atlanta District first, economic activity in our part of the country I think reflects pretty much what's going on in the nation as a whole. Export demand and import substitution are really the driving force in the economy and are supporting many of the basic industries in the District, namely chemicals and paper and steel and so on. In many of these cases, this kind of activity is generating pressure on wages, and it's showing up in the shortage of skilled workers, particularly in the chemical industry. In other industries, as I think the Chairman mentioned earlier, notably steel, the use of labor saving equipment has prevented this kind of pressure from developing. The wage increases that we are hearing about are reported to be in the 4 to 6 percent range, which is substantially higher than we had been hearing before. And I think it's interesting to point out that this kind of increase does not include benefits, some of which are being added to the employee's costs but a lot of it is being assumed by the employer. We are seeing export demand confirmed in other areas where we see

industrial warehouses being built at several of the southeastern ports, Savannah for example, and also some places in Florida.

We have some weaknesses as I've reported before. We have high apartment vacancy rates and these have resulted in a number of projects being put on hold. Consumer demand has been fairly sluggish and this has led to softness in appliance production. Import competition is still affecting the apparel industry fairly adversely. In general, Mr. Chairman, if we exclude Florida, where growth remains pretty strong, activity in our other states in the District is on average moving at a rate that's somewhat slower than the nation as a whole with Louisiana, of course, continuing to be at the bottom of the list.

Looking at the national economy, our outlook is considerably stronger than the one shown in the Greenbook, but basically because we have an unconditional forecast. And going back to the earlier discussion, I would hope that in any consideration of alternatives we might consider an unconditional forecast at least as an alternative. We are a little surprised and we disagree with the Greenbook forecast in terms of consumption expenditures, which we think will be stronger. And also we think that spending on nonresidential structures will not deteriorate quite as much as is indicated in the Greenbook. Those seem to us to be a little more consistent with actual recession or a substantial downturn than with the projections that the Greenbook shows. Putting this together with our forecast and recent economic indicators, it seems to me that the economy is growing too quickly and I don't think we have sufficient monetary restraint in the economy at the moment to avoid an uncontrollable level of inflation.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, the Twelfth District economy continues to report healthy economic growth with only a few signs of slowing. Manufacturing activity continues strong with particular strength in aluminum production and the aerospace and aircraft industry. However, we have seen some slowing in the lumber and paper industries where there has been some slowing in demand. In general, real estate activity in the District is robust, but there are some notable exceptions in Alaska and Arizona where commercial real estate is particularly weak and also in Utah. On balance, if we look at wage and price pressures, they clearly are upward and seem to have increased slightly in the intermeeting period. An exception to this is the forest products industry where, as I mentioned, some slackening is showing up and it is having an impact on prices that is quite dramatic. However, in general terms labor markets throughout the District are really quite tight. And if you recall, at the last meeting I indicated there even were signs of firms that are trying to locate in areas where there is greater slack--not in the built-up areas of Seattle or San Francisco or Los Angeles.

With regard to the national scene, the economy remains at a level above its long-run potential. As a result, there seems to be a significant danger of more rapid inflation later in 1989 and especially in 1990. Our forecast of real growth in 1989 is not greatly different from that of the Greenbook. It seems to me that the implications of both outlooks are the same and that is that no significant slack in the economy will emerge next year and that

underlying inflationary problems are going to continue to worsen. If the dollar declines in value, as seems likely, that will mean that actual inflation rates will be subjected to further upward pressures as well. It seems that projected economic growth and inflation in 1990 argue strongly for policy tightening through the end of next year.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I guess this would be the first report in four that I've given where, for the latest three-month period and this one would include the period through October, we've had some gains in nonagricultural employment. But those were quite modest, really, and primarily in the manufacturing sector. In the latest three-month period, manufacturing employment is up about 1.4 percent over the preceding period. In both residential and nonresidential construction on a year-over-year basis year-to-date, activity is down substantially, not quite double-digit in residential and about 13 percent in nonresidential. Christmas sales in major metropolitan areas I would say--and this doesn't include this last weekend--are running a little better than last year. In St. Louis and Memphis, that would mean a nominal gain of about 5 percent. Little Rock, and Louisville actually will have slight to moderate decreases on a year-to-year basis. The general sense is that retail inventories are in good shape and there is not a lot of evidence of unplanned price cutting. There have been price promotions, but they pretty much have been planned so far. Also, in the retail area, while [there is] difficulty finding help, we don't pick up a sense that there have been a lot of wage increases in the retailing area. One other anecdote I might pass on, is a large manufacturer of consumer durables; his general sense is that cost increases may have abated a little on the raw material side. They are very difficult to pass on and are being absorbed in margins. His sense is that basically this will continue to keep a lid on wage pressures in that particular area. And I guess that's the general picture there, although it certainly is not surprising given what we see on a broader basis in that sector.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. Mr. Chairman, in the Eleventh District I think we are beginning to see a two-tier economy emerging. I think there is a little more optimism than we've had in the past. Those outside of the real estate construction and banking sectors are participating in a reasonably strong recovery now. Of course, energy is a swing factor, and the apparent stabilization of energy prices--or at least the lesser likelihood of a precipitous decline--bodes well for our part of the country, although from the inflation side people might wonder a little. This dichotomy kind of shows up in manufacturing, where industries related to foreign trade are doing well, while activities related to energy and construction are not doing all that well. Also, on the agricultural side, livestock producers are going to be squeezed somewhat because of the higher drought-related feed costs, yet the farmers with cash crops are doing pretty well. We think that employment growth in our three District states has been about 1-1/2 percent over the last year which is considerably better than the declines that we had in 1986 and 1987. Perceptionwise, anecdotally, and attitudinally, things really are improving. As I've

reported earlier, in Houston the improved attitude started I'd say 6 or 7 months ago. It's beginning to filter up from the coast to the Dallas area. We've had some fairly visible announcements made such as GTE relocating their telephone operations into the Dallas area out of Connecticut. They are talking 4,000 to 5,000 jobs and about 1,000,000 square feet of office space; they are going to build a big campus-style facility. A Japanese firm just made an announcement that they are going to build a manufacturing plant. They are talking about 1500 jobs in telecommunications manufacturing out there north of Dallas. Of course, the announcement on the super collider just thrilled everybody. It probably will never happen and won't get funded, but everybody is really happy about it.

MR. KEEHN. Not everybody.

MR. BOYKIN. Everybody that counts.

CHAIRMAN GREENSPAN. I assume that it was announced that they only had one state participating, everyone else decided [unintelligible].

MR. BOYKIN. That's the way a lot things can go out our way. Also, there's quite a bit of optimism given what appears to be a fairly significant Texas influence coming into the Washington arena with a new Administration.

MR. BLACK. That may not be shared in other states.

MR. BOYKIN. Yes, I'm not sure that's going to mean a whole lot, but it's being talked about as good for Texas maybe. On the national side, --

SPEAKER(?). You're supposed to be quiet about that, Bob.

MR. BOYKIN. Okay, tell all the secrets, right?

MR. BLACK. We noticed.

MR. BOYKIN. On the national side, we are pretty much in agreement on the staff forecast. I think there is obviously a chance that the economy will be even stronger than the forecast. We are a little more pessimistic on the inflation side. That being the case, I would be inclined for the reasons that have already been expressed to put in a little more restraint, and I'd be inclined to do it sooner rather than later.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. The regional economy continues to operate generally at a high level and the current indicators are positive. There are some pockets with some problems, but generally labor markets remain tight. Manufacturing continues to grow. The retailers seem to be feeling better now than they did several months ago. Loan growth is running well above the national average. There is some slowing in the nonresidential area, and I think there are early indications of some slowing in residential construction. There is some sense that next year at least the growth in the economy will not be as fast. It's hard to sort out whether this is supply constraints or lack of

demand. I suspect it's a combination of both. But the outlook is still for a high level of activity.

As far as the national economy goes I think it does need some reining in. There are risks on the inflation side. But reaching that conclusion is not a one-way street. There is a whole set of risks that everybody around this table is familiar with--mostly in the financial area, thrifts, LDCs, LBOs, etc., etc. So, while we clearly need to rein the economy in, about the last thing we need is a recession and there is no sure way of reining in an economy without a recession. But even acknowledging all these risks, I don't think that you buy very much by ignoring the inflation side. I think these risks will tend to get larger if we don't deal with inflation. So, I come down on the side of reining in but doing it with some caution.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, we see the outlook just slightly differently from some of the comments so far; and again I would say, in the national context, our outlook for next year is a little more modest than the staff forecast.

In terms of the District, there are really very few changes to report from the last meeting. Certainly, the District economy has moved along at a good pace. I think everything is very solid and there are no significant soft spots out there. But while the current situation does seem very solid, I must say I find the price inflation outlook to be particularly difficult to assess, and I find this an unusually difficult period. The Greenbook and Mike's presentation yesterday clearly make a case that the economy is moving along very rapidly. I think we've got some big price pressures out there, and I do find some of the data to be compelling. Maybe we do have a somewhat overheated economy on our hands. Alternatively, no one that I've talked to certainly is pessimistic; the attitudes with regard to next year I find very positive. On the other hand, from our director reports and our other contacts, I don't sense a particularly big upsurge as folks look into the next year. There are some constructive signs out there. Capital expenditures, particularly for equipment and machinery, are moving ahead at a very good clip, and many of these expenditures are being directed to industries that are operating at pretty high capacity rates: chemicals, petrochemicals, paper and the like. That ought to relieve some of the capacity constraints in those industries. Also, I'm hearing that some products that have been sold with long lead times or allocations are beginning to ease somewhat. Indeed, orders for communications equipment and electronic components clearly are showing signs of peaking. In autos, inventories as Mike reported yesterday are at higher levels. Therefore, I think it's entirely possible that the production schedules will be reduced for the first quarter of next year. And it's just possible that some of these prices that we have been hearing about are showing signs of some stabilization. An example I would give is a company I talked to that keeps a very good track of its expenditures for materials; this year their expectation is that their material costs will have gone up about 2.3 percent. Next year, they anticipate an increase of about 0.4 percent. They are very careful about [their estimates] and they keep good records. These numbers may not be typical of industry at large, but I think it's entirely possible that the trend is.

In my mind the big question is on the labor side. As I go around the District, everybody I've talked to reports a shortage of skilled labor. Labor costs are rising, but this is frequently on the non-wage side as opposed to the wage side. I think firms are continuing to get pretty good work rule changes, and therefore unit labor costs are under reasonable check. In a pricing perspective, the question obviously, which we'll talk about later, is whether we have done enough or should do more. Instinctively, I have the feeling that we've got a very strong economy on our hands. The price pressures are building up. We may see some increases, particularly in the near term. But also as I said I think there are some signs of stabilization. I continue to think that the risks are on the price side and that an upward policy bias will certainly be appropriate. The point I'm making is that I'm not sure just how draconian we need to be at this point to deal with these pressures.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I've reported at a number of meetings now about the generally positive, actually quite positive, economic conditions in the District. I've been in a lot of meetings since the last meeting of this Committee and that general tenor certainly continues. In fact, one of the striking things about those series of meetings is a lack of discussion of problems that people are encountering. One exception to that deals with things that I think we are well aware of like excess office space, hotel space, concerns about what people perceive to be some of the excesses on the financial side of the business world. I hear a lot of talk about the shortages of labor, not just skilled but unskilled. But that does not seem to have translated into what I would call generalized acceleration of wages from where they've been running. While you can find people who are talking about having to raise wages 6 or 7 percent, that is by no means typical. And I get the sense that generalized pressures for a variety of reasons just have not built up, and I have not been hearing anything about a generalized acceleration in prices either.

As far as the national circumstances are concerned, our model forecast is somewhat stronger than the Greenbook especially going out over time. But that forecast has essentially flat interest rates. And, therefore, I take that forecast in some sense to be consistent with the Greenbook. That is, if you want at some point to start to constrain inflation more than we have and bend it down, it is going to require higher rates. If not, you are likely to get something that our model generates which is somewhat more rapid growth and no discernible progress on the inflation side. I think, as several people have already commented, that the latest batch of national statistics has removed a lot of uncertainty about the state of the economy and suggests that it just has a great deal of momentum to it. Even if we allow for the possibility that these statistics might be revised in the future, the gauges have been very high. And as I've commented before, it seems to me from some work that we've done at our Bank that we've got to start looking toward employment gains that are running more in the neighborhood of 200,000 workers a month or less if we are going to be on a sustainable path and if we are going to bring inflation down further over time. And I suspect that if and when that happens, there is going to be a lot of comment and some concern about whether the economy may be slowing excessively. And I would suggest that that's more like what we need and more sustainable.

CHAIRMAN GREENSPAN. First Vice President Eisenmenger.

MR. EISENMENGER. If I could start off with the exception, which would be the New England economy, we've had the tightest labor in the United States during the last two years, and we are beginning to see some of that soften. In the Connecticut area, they have moved operations to the one remaining area which has some soft labor markets--Maine. And as Bob Boykin just mentioned, GTE is going to move to Texas. Our relative wages have moved up rapidly, and I think that's one of the reasons we may still be the hottest labor market in the United States, but the gap between us and the rest of the country is diminishing. What's happening I think is that the tightness is spreading throughout the country; it's not getting any tighter in New England. I would agree with Mike Prell's conditional forecast, which I also think is consistent with Bob Forrestal's and Gary Stern's forecasts, which are unconditional; and what we see if we move toward restraint is more modest growth next year, which would appear to be desirable. The only issue on which we might disagree with the Board staff is that even with that move toward restraint, we are a little more pessimistic about the inflation rate next year. We don't see many indicators yet of price pressures; they aren't creeping up very fast. But the compensation figures are increasing very rapidly; there has been a big uptick in compensation. And that does pass through to prices with not too long a lag.

CHAIRMAN GREENSPAN. Bob, is this a recent pattern you are talking about or--

MR. EISENMENGER. Yes, we are talking about what has happened during this last year, and we are talking about three quarters--

CHAIRMAN GREENSPAN. What I'm trying to say, have you seen evidence of any significant acceleration in wages for the last, say, two or three months or is it just--

MR. EISENMENGER. If you mean unionized wages, no. I was referring here to the figures on the employment cost indexes.

CHAIRMAN GREENSPAN. These figures apply to the year as a whole?

MR. EISENMENGER. Yes.

CHAIRMAN GREENSPAN. Okay.

MR. EISENMENGER. And then, no matter how you measure it--one two, or three quarters--it appears to be consistently greater this year than it was last year. I guess for the last two years many of us have underestimated the growth rate of the economy. We've always been a little surprised that it has been a little faster than we anticipated. The latest figures suggest we are going to be a little surprised with the fourth quarter so that we always lag behind a little on the real growth that has come through. So, I guess that would tend to bring about a little support for Mike Prell's assumption on a move toward restraint, or else we won't have that slower growth that he has built into this conditional forecast. I sat in this room on the outskirts with a lot of my former research colleagues during the late 1960s and the early 1970s; and in retrospect we saw, year

after year, that we ran on the ragged edge of full employment--on occasion a little overfull employment--and then gradually the uptick in prices got imbedded in an inflationary psychology in the economy. And we can only wipe that out at incredible expense in the labor markets in the United States and throughout South America and the world, and once that inflationary psychology gets embedded it's very expensive to get it out. I don't know if we'd ever do it again; the medicine for that is to take some prevention, and this way we don't get the same kind of environment embedded in the economy that we did gradually during the late '60s and '70s.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman I've been following these Greenbooks for a long time, and I think really in the last year or so they have been considerably better than they were before then although they have always been good. And I found this one particularly helpful although it does make me darn nervous on the inflation side because it suggests that there's very little room for error. It projects a further tightening of policy over this period and an appreciable rise in interest rates, and this doesn't cause the underlying rate of inflation to diminish very much, and then only well into 1990 when the decline is modest at best. So, it seems to me that the risk of error really is that we are probably going to have more inflation than the staff has in the Greenbook if in fact there is any risk of error in this. Wage pressures, as several people have indicated, are increasing--not rapidly in some cases--but certainly unmistakably; and if consumer prices increase at the rate of 4-1/2 to 5 percent that they are projecting for next year, it seems to me it's almost inevitable that we will begin to see some wage pressures then. So, I would not be surprised, in the absence of some action on our part, to see, rather than declining inflation in 1990, some wage-price spiral feeding on each other.

and
he expected wage pressures there and elsewhere to be considerably stronger than most people seem to anticipate.

Now, on the real side of the economy, my guess is that in the first part of next year anyway despite signs that the rapid upward pace of some of the foreign economies may be slowing to some extent, we are still going to have perhaps a little more restraint in our export demand than the staff has suggested. And with the growth in employment and income that we are having in the domestic economy this suggests to me that probably domestic spending is also going to be stronger than the staff is projecting. So, I think we've got an incipient boom on our hands, but basically I'm in pretty close agreement with the staff in what needs to be done to control that.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. Despite my carping remarks about using Phillips curve analysis, we've tortured the data in a number of ways and come up very close to what Mike does and we have no other way to do it except that. I still am caught with the notion that monetary policy affects nominal variables over time and not real variables. And I guess we can attribute this just to our short-term adjustment process.

There's nothing that I can add to what's been said with respect to either Mike's forecast or the strength of the economy overall.

The District, as I've been reporting consistently for over a year, is strong and we don't see any noticeable softening. We don't see any breakout, however, either. We have met with a number of small business groups and also with our directors and the stories there are prices increases in terms of product price increases ranging from 3 to 7 percent, maybe a little higher in a few instances. Wage rates--our highest is probably around 6-1/2 percent in services areas in the Columbus market. There is somewhat of a skilled labor shortage; semi-skilled, there's no problem. Manufacturing people can attract the latter without any real upward pressure on wages except for the entry level in manufacturing where there is pressure in the low-skilled jobs. So, it really hasn't changed much; it looks like a fairly robust Fourth District. The only concern that I have relates to the monetary base. We take the Greenbook forecast and then get an implied growth for the monetary base by using the Rasche model. It has a drop of about 1-1/2 to 2 percentage points from this year's growth rate. I don't know whether that's significant or not any more. I used to think I knew. But it does cause me some concern. So, I'll address that issue in more detail when we get to Don's presentation. Overall, I think the costs of allowing inflation to become embedded in the economy are very high, and I would skew policy and take the risk on the side of being overly tight.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Thank you, Mr. Chairman. There is not a great deal new or different with respect to the regional economy. Agriculture, for example, is very strong. There's a smile on producers' faces simply because the harvest is in and grain commodity prices are high. Along with Bob Boykin, I think the red meat producers probably will be squeezed in the period ahead because of those higher grain prices. Our manufacturing sector is fairly strong, particularly in the export-related types of products. In autos, all of the plants in our District with the exception of one are working a two-shift arrangement. That one produces a car that apparently is not selling, so the workers have simply been given a holiday over Christmas, and just recently that has been extended another four days; so it's the product that they are producing rather than the overall demand for automobiles. One other strong area is the high-tech area along the eastern slope of the Rockies and down into New Mexico. Those high-tech areas that were depressed a couple of years ago have come back and are doing very well. On the weak side, the energy sector in the District and construction, both residential and commercial, are depressed. Retail sales I'm told generally are sluggish. There was a very big day or week after Thanksgiving, which there always is, but rather than continuing on through, sales have dropped off in the major cities in our area. Whether that will come back with an additional weekend to shop before Christmas, our retailers don't know; they are still optimistic. Inventories are in good shape.

With regard to the national economy, we are very, very close to the Greenbook forecast, but we didn't build in any restraint which means they are stronger than we would see the economy. But given the comments from directors, businessmen, and others there is a very

strong feeling that the Federal Reserve has a role to play and it will play that role in restraining inflation. As a result everybody talks about it. It is a concern and I think that I would come out on the side--even though our region trails the national rate of recovery--of addressing attention more closely to inflation than I would to the level of real output.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I've been somewhat surprised that the slower money growth hasn't shown through in auction markets, both foreign exchange and particularly in the commodity markets. M2 in the last four weeks over 24 months previously has grown I believe at a 4.7 percent rate which is the slowest growth rate over a 24-month period since 1961. I'm somewhat surprised that that hasn't shown through in auction markets, both foreign exchange and particularly commodity markets. But it seems to me we clearly have had some upward shocks in those commodity prices, some of them due to the more rapid money growth that took place in 1985 and 1986, and I suppose the most recent round based somewhat on a weather-related condition. But the fact of the matter is that commodity prices have plateaued; there have been some ups and some downs but there has not been a retrenchment from those levels that have given ample profit margins to induce we would hope further output. But it would seem to me that the real key question here is whether we maintain a posture in which the profit margins are expected to be obtained by maintaining restraint on costs and getting cost reductions through economic efficiencies by the use of some new capital and new techniques, or whether some of these higher commodity prices that have not yet passed through it seems to me to the entire consumer-price structure are going to be maintained at this level long enough until that takes place. So, it seems to me that given the fact that inventories are not in a position yet where there has been any inventory holding based upon price expectations, at least it doesn't seem to be clear there that we do have extreme vulnerability at this time to foreign exchange rate adjustments that might I think translate immediately into an inability to bring those commodity prices into line as to where they ought to be. I don't mean to put too much emphasis upon gold, and yet it's just somewhat representative of what I think happens here. As you know the price of gold did move down from \$500 to \$400, but there certainly has been ample evidence that the price would have the tendency to move back to the \$420 range. It just seems to me that as the first of the year moves along for us and we get some return of growth in demand deposits, Don, that the opportunity cost changes that are already in place may not be sufficient to give us the further restraint on monetary growth. I'm still going to continue to believe that if we do get that restraint on monetary growth that we will get a better solution than some anticipate. But it's far better for us to be in tune to these problems at this point in time than to wait and get behind the curve.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Partly because our meeting cycles are a little out of synch, I don't have a lot to add on the anecdotal side at this point. My own general impressions in terms of the economy are that it is strong. In fact, I think it's too strong. Some of the very recent numbers, especially the labor market numbers,

conjure up at least in my mind some of my worst fears as a matter of fact. Insofar as the outlook is concerned, I think it is very illustrative to look at the Board staff's forecast versus the New York staff's forecast because as I've mentioned before by the end of next year those respective forecasts have a difference in the inflation rate of 1.3 percentage points or 1.4 percentage points. That is a very, very dramatic difference. As usual, Mike Prell touched on a critical point concerning that result, or outcome, yesterday when he said that in the process of putting his own forecast together he was continuing to resist the temptation to build into his own price forecast some of the types of behavior or results that might come out of historical experience. And indeed when you look at the New York staff's forecast versus the Board staff's forecast what you have in the Board staff's forecast by the end of next year is a rather distinct negative spread between unit labor costs and the deflator. In the case of the New York forecast, you have a positive spread between unit labor costs and the deflator. At least in an arithmetic way, that is what produces the sharp difference in the net result of inflation at the end of the period. Both have a rather significant further buildup in the rate of increase in compensation per annum. I think in the eyes of the people that do these forecasts in New York, what they essentially or implicitly are saying is that the overall economic conditions, market conditions, and so on are such that you will still maintain at least a small, positive spread between those two variables. My own hunch, if I had to pick a point, which I try to avoid doing, I guess I'd pick a point somewhere between the staff forecast here and the staff forecast in New York. But as I see it, the risks, as I have said before, are really very asymmetric. When I ask myself, what if Mike is right--Mike being collective for the Board staff--I'd say that's pretty good; it's not ideal in that he's got some things in that forecast that give you a little chill, but certainly I'd say "terrific." Then I say to myself, what if the New York staff is right? I'd say, holy mackerel, we've really got trouble, big trouble. It's in that sense that I think the risks really are quite asymmetric.

Now, like a lot of other people, at this juncture I continue to draw some consolation as we were talking yesterday from what things like the long bond rate are telling us. Again, that's probably one of the reasons why I would be inclined to split the difference between those two forecasts. But I would tend to be pretty cautious even about that. I reminded myself last night, and I think this is illustrated in one of these charts that I guess Don is going to talk about later, if you go back to 1978 and despite the fact that there had been several increases in the discount rate as well as a firming of monetary policy over the course of 1978, by the end of the year we had a federal funds rate in the area of 9-1/2 to 10 percent; one-year Treasury notes at 10.60 percent; and the 30-year bond at 8.80 percent because we had a sharply inverted yield curve. We all know what happened after that. Now, 1988 is not 1978 for a variety of reasons, not the least of which is the energy shock that came in 1979. But at least to me it does illustrate that we have to be cautious in terms of what we read into these things. And again, it just reinforces my view that the risks as I see them at the moment are asymmetric on the side of the inflation rate being higher than the staff forecast.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, first of all I'd like to report to you that, on behalf of the Board last night at dinner, I congratulated President Hoskins for having achieved his first objective and that is getting alternative "A" clear out of the Bluebook.

MR. HOSKINS. Everybody wants it back in now, that's the problem!

MR. KELLEY. And he told me that he was working closely with the staff to get back to a three-alternative Bluebook, and they will be "B," "C", and "D"!

MR. BLACK. He has succeeded where many of us who have tried before have failed!

MR. KELLEY. Mr. Chairman, first of all, I certainly concur that the economy is very strong and certainly stronger than I had expected it to be. And I would anticipate being in favor of some further tightening. But I'd like to return for just a second to a point that Ed Boehne made a little earlier, and maybe try to come down a little bit harder on it. That point is that I think we need to try to be sure to maintain a very broad perspective on what is going on in the economy and in our society more broadly and on how best we might be sure to achieve our long-term goal of price stability. Over the foreseeable horizon in the next year or two, I think it's in nobody's interest to allow--that's too strong a word--nobody's interest to have a recession occur. There are a lot of things that need to be straightened out. We all know what they are: the budget deficit, buying our way out of the thrifts, working our way through the Texas banks, chipping away at LDCs. Large money-center banks and maybe some others are going to need to raise some capital for risk-based capital. It's probably not too irrelevant to look forward to the fact that the GATT issue is beginning to accelerate; we had some first shots here recently on that, and if we wind up in an environment of protectionism as that heats up, I think it could be unfortunate. If we are in a bad economy, I think banking structure reform might very well be a victim of that in the Congress. If we have a recession in the next year or two, I think it clearly is going to exacerbate our ability to make progress in just about all of those different areas. We could wind up kicking the deficit sky high which could bring a terrible dilemma, in my view, to the FOMC because I don't know whether such an event would be highly inflationary or deflationary or maybe one then the other successively and both bad. Clearly, it could put both the Administration and the Congress on the defensive across the board on a lot of issues that could be serious. So, in short I can envision a scenario where if the economy were to go south too far too fast, we might wind up spending many more years trying to get to price stability than we would under some alternative scenarios. I would simply like to say that it's my hope that as we do go forward here, we'd be very careful as to how aggressive we get. We don't want to wind up with a Pyrrhic victory.

CHAIRMAN GREENSPAN. Governor LaWare.

MR. LAWARE. Well, I've always been convinced that inflation is the enemy of the people, and I think the inflationary pressures out there that have been described so eloquently by several of you certainly indicate that some [policy] snuggling is necessary. I hope

it's not too heretical to say that I think that the markets expect it and that a failure to do some snugging at this point would be sending a very bad signal to the markets. And so I'm encouraged that we ought to do that. Certainly, the economy continues strong. But I've got a metallic taste in my mouth when I start trying to quantify--and this is the difficult part--the implications on these fragile elements in our financial system of a 200 basis point rise in interest rates, or something comparable. Ted has commented that that was not an attractive factor in connection with LDC debt. And whether we like it or not, there are still a lot of the biggest holders of this debt who are under-reserved by any measure of the marketplace. We have these very fragile LBO deals where the cash flow coverage of their debt service is so tender that anything that might happen to the economy would create a downturn in revenues or an increase in the servicing cost of debt that could crash one or more of these big babies. The ripple effects on investors and on the confidence factors in the economy I think are kind of awesome to contemplate, plus the fact that we are just digging the hole for the thrifts at a much greater and faster rate with this, and nobody has yet come up with the right answer to that one. More recently, we've had the question of real estate overhang, and a higher set of interest rates is obviously going to at least prolong the resolution of that overhang. So, at the risk of sounding like a broken record I think as we apply the brakes here, if that is what we are going to do--snug up--we ought to do it very gently, and as Mike Kelley has said, keep our eye on all of the effects that a snugging has on the economy and be ready to deal with them quickly if we find the thing getting out of control. I think the costs of getting back if we really dump this economy would be terrible.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I've been sitting here listening, then trying to match the comments with what I read in the Beigebook. Either some weeks have passed or else I just read the Beigebook wrong. But it sounds as though the views expressed were quite different; namely, the views today are much more optimistic than what was presented as those observations. Also, maybe Mr. Hoskins can help me out on this, it seems to me the NABE runs periodic surveys of members, and it seems that roughly half of the members expect a recession some time next year. And most of the remaining respondents expect one in 1990.

MR. HOSKINS. I don't have the numbers, but I think the majority expect a recession within the next two years.

MS. SEGER. It was 47 percent next year.

MR. PARRY. Of course, two-thirds expected one in 1988.

MR. HOSKINS. We tend to roll those things forward.

MS. SEGER. But when I read these I'm trying to ask what they know that we don't know or what are they assuming that we are not assuming. Again, in talking with some business economists, I think they are somewhat more pessimistic on the consumer side than our staff forecast. And in the housing area, at least, again I think some of them might be a little more pessimistic. A number are bringing out these stories of real estate problems, even in the Northeast. I think

there are some banks in the Northeast that are now actually indicating that they are going to have to take some losses on real estate loans which is quite a change from what people were telling us a few months ago. I think this is also true in some other parts of the country which have been doing extremely well and now are turning around a little bit. I can't imagine that that's an environment in which developers are going to hustle out and start more condo projects and apartment buildings, etc. Also, in the capital spending arena some of the reports that I pick up--computer chips, those sorts of companies--it seems that again the situation has changed dramatically in the last few months. In fact, in some cases they've gone from a shortage of chips to situations with almost an excess. Also, some of the auto economists I know are a little more pessimistic about the inventory situation than I've heard expressed around the table here today. In fact, I heard yesterday that the days-supply for one of the very large auto companies would be a little over a 100 at the end of January. That's high. Also, when you get that kind of inventory situation in autos, you do see them follow through with some production cutbacks. They have used incentives to a tremendous extent as you know, but the "bang for the buck" from incentives seems to be petering out. So, if I had to come down on one side or the other, I would think they would fix this through some production changes rather than trying more incentives.

Also, in the export area I'm not sure that all the business economists I've spoken with and some other contacts I've made expect the strength in the exports to be as great. They would certainly like to get it, but there is no real confidence that we will continue to make these tremendous advances that we have. Also, in the area of inflation and price stability, etc., one of the things that I think econometric models haven't picked up or haven't captured is the changed situation out in the real world, particularly in manufacturing. I mean the changes that are going on, the emphasis on efficiency, productivity, cost controls, knocking off layers of management, etc., I think that has been going on the last couple of years and I think it is still going on. And frankly when you look at some of these relationships back 10 or 15 years, it was a very different America then. I think we've learned something and I can't imagine that these improved attitudes are just going to suddenly evaporate. Also, I think on the labor side some of those people too would rather be employed at \$17 an hour than unemployed at \$18.25. Ask your friend with the building trades why so much of the commercial building is being done by non-union workers. Maybe that's had some impact on the fact that unions haven't had those nice settlements that they used to drool over. They, too, may have to pay attention to markets, Bob. This is a shock to union people.

MR. BLACK. I think they have.

MS. SEGER. But it seems to be going on, and particularly if construction isn't rocketing ahead, I would say that the bargaining power of management might be even stronger now than it was a couple of years ago. And also, looking at some of the sources of the higher prices that we have seen, I'm not sure we are able to control them. For example, looking at copper prices, what are we supposed to do about a strike some place? We are going to go down and pull the people back out? I mean, that has influenced the copper prices. Wayne's farmer friends have certainly suffered from bad weather

conditions this year, and that has certainly put upward pressure on prices of agriculture commodities. I don't know what we are supposed to do about it. And also, looking at the prices of some the steel products, it seems to me that they have been influenced by these silly quotas that we've put on the imports of steel. So, maybe we need some help from our pals down the street to fix some of these things.

Now, I think the Federal Reserve ought to do its job. And I know Roger Guffey says everyone is looking to us to do it. Maybe we ought to tell them that we can't solve all the problems, though we can do our share certainly. Picking up on one of Governor LaWare's comments, I think the problems in the thrift area are very, very severe. I met Monday with a person who is I think pretty expert on thrifts

and he had some very negative things to say about thrifts.

He indicated that even building into their cost of funds the existing level of short-term interest rates would do tremendous damage, because it doesn't feed in immediately. You have CDs that have fixed maturities and it takes a while for existing levels to influence those. He's not a crackpot on this subject, so I took his comments rather seriously. And also on the LDCs, I think that that is something that really could give us and the banks that have been involved with those things even bigger headaches. So, I just think it's a very difficult call. My own personal conclusion would be that it's not certain that 1989 and 1990 would be excessively strong even without a 200 basis point advance in interest rates.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I'd generally like to associate myself with what Governor LaWare and Governor Kelley said. I think everybody made a lot of useful comments, but they captured a lot of what I wanted to say. I think generally that the economy is reasonably strong, a little stronger than I probably would have expected at this stage as well. But we've all acknowledged that we see some signs of slowing and I think that's probably in the works but at a fairly high level. I think we've done a good job in establishing the credibility of monetary policy during this period. I say that because I think it is illustrated in the way the financial markets have behaved with long-term rates remaining stable or even showing some signs of declining. Commodity prices, while they are at high levels, have plateaued and have trended down some from their peaks if you take them all together. The dollar has been relatively stable except for this one speculative period after the elections, but I think it's still about 5 or 6 percent above where we started the year. So, in general I think we've pursued a credible policy and haven't been behind the curve, although I agree with what John LaWare said--that part of what we see in the financial markets is the credibility that's based on what they expect us to do. And so I think that if you want to maintain the degree of confidence in the financial markets that you see right now, some tightening is probably necessary. I'm not opposed to that, but I think it's very important to consider the speed at which we undertake these tightening actions. We have to do enough to be credible and to appear to be ahead of the situation, but at the same time we've got to be very careful to consider all of those contingencies that were mentioned by John LaWare, Mike Kelley, others here. I happen to have some additional worry about a world-wide ratcheting up of interest rates because I do think Germany is about to move, and I think all of

Europe will follow because of the EMS. I think that's already evident out there if you look at the markets and what they are prepared to do. Europe is prepared to ratchet up rates right away. As a matter of fact, one or two countries already have moved up their discount rate. Whether Japan follows or not, I don't know. But we are about to move the world level of interest rates up in general and that obviously is going to have some effect on the LDCs. It's going to feed back on the thrifts here, equity markets, and all of those things. So, taking all these things into consideration, I still think it's probably a necessary move, but we should be very careful about a sledge hammer effect. We need to be careful in the pace, that's all.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Almost everything has been said, Mr. Chairman. Let me make three points briefly. First of all, I think we've got to continue to make progress on the inflation front. We have seen a 1/2 percent increase in wages and a 3/4 percent increase in total compensation. That is unacceptable and will lead exactly to what Bob Eisenmenger was saying was happening in the 1970s, a continuation of the slow upward creep of inflation. What I find troublesome about tightening policy, in particular, is the ill effect on investment; the staff forecast has a 0 to 1 percent growth in investment for 1990. If we are worried about capacity constraints and things of that sort, certainly we are not going to be building any additional capacity in that environment. What makes me feel a little better about tightening is that I think there is a lot of unexploited potential in the export area. A lot of American manufacturers really are not yet focusing on that at all. And so I'm a bit more optimistic than the staff forecast as far as continuation of export growth is concerned at going exchange rates. A lot of speakers have mentioned that we have to be aware of the fragility in the financial system. I think that's certainly an important point. But I would say that we can't design monetary policy to avoid any difficulties in various sectors. In the first place, we've got to focus on inflation and if something goes wrong then you can address those problems very much in a manner in which we have addressed them in the past--for instance, after the stock market crash last year, through a quick adjustment in policy. So, I'm also in favor of a tightening of policy. But just in case you feel too good about the whole thing and you haven't read Paul Erdman's "The Crash of 1989", and you still haven't ordered your Christmas present, if I remember correctly the opening sentence of that book is, "It was early December 1988; the Federal Reserve Open Market Committee was meeting in Washington and there was a chill in the air." The rest is history.

MR. ANGELL. Bob, it seems amazingly warm to me.

MR. HELLER. I think that was the sentence.

CHAIRMAN GREENSPAN. Didn't he also write a book the "Crash of 1979"?

MR. ANGELL. Please don't [unintelligible] suggest outside this room.

CHAIRMAN GREENSPAN. I should hope not. Why don't we break at this time and we'll resume with Don.

[Coffee break]

MR. KOHN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Thank you, Mr. Kohn. Having listened to all of this, certain things seem to be coming forth fairly clearly. One starts off with the quite credible concerns of Governors Kelley and LaWare about the dangers of a recession. I think that we must make certain that we focus policy in a manner which reduces the probability that we will be confronted with that. And that strikes me as a requirement to make certain that imbalances don't emerge in a manner which tilts the economy over. As far as I can see, the only way we can do that with some degree of reasonableness is to move toward a tighter policy at this particular stage. The open question is when and how much. The issue was raised in the Bluebook about the alternative of the discount rate. I must say I have some problems with that largely because the distinction between a discount rate and an open market operation is, or should be, largely the announcement effect. I don't think at this stage that we have any need for an announcement effect. I believe that judging from the structure of the markets that what we are doing is perceived by the markets as being sufficient to constrain inflationary imbalances. The markets may be right or wrong about our actions, but if you look at the extraordinary stability of the long-term rate that's what they believe. And so long as that is the case, I do think that does suppress the possibilities of the wage acceleration that I'm sure would occur otherwise. In any event, what I think we have to say to the market is pretty much what they've been expecting us to say and what they think is the right thing to do. Under those conditions, I don't think it is necessary for us to make a big "gong" as would be the case if we fell behind the curve, so to speak. If we found we were off center we would have to hit a gong and say we were back here or there. I don't think that is necessary, and in fact I think it probably would have some secondary negative [unintelligible].

Having said that does not mean that I think we should shrink from open market tightening--because at this stage, maybe at any stage, you really have to ask the question of what happens if you institute a policy and you're wrong. Well, from all the evidence that has been introduced around this table this morning and yesterday, I think that with the contemplated tightening that we've been discussing the risk of tilting this economy over at this stage is exceptionally small. Moving forward and finding that we made a mistake is a possibility, but I think the cost of such a mistake is really much smaller than the cost of doing nothing in the face of what basically is going on. As a consequence, the way I see it and I'd be curious to get responses is that (1) I think that we should tighten and I think at the end of the day, meaning certainly by the time we are back here the next time, we should be up by \$200 million in additional borrowing. I would be disinclined, however, to do it immediately if for no other reason than I think we are potentially caught in the ratcheting in the EMS that's in the process of going on as Governor Johnson indicated. I don't think it would be useful for us to be perceived in the markets as trying to ratchet up with them. And we'll get the type of results which I think we unfortunately obtained in the summer of 1987. As a consequence of that, what I would think is a possibility, at least one that I'll throw on the table, is that we move \$100 million immediately with asymmetric language, with the

understanding that unless something changes the very strong outlook in the period immediately ahead sometime in early January we move another \$100 million at the discretion of the Desk with regard to the question of timing and the change in specific data or information. So, I would suggest that as a beginning. I must say that I hope we don't have to go the 200 basis points that's implicit in the staff forecast because I think that's going to create a lot of problems for us. But I don't think there's any difficulty in moving roughly 1/4 to 1/2 a percentage point in here. Clearly, it does move LIBOR, and it will move the prime rate; it will have some negative effect on LDCs and on the S&L cost problems. But in my judgment, the cost of not moving would be far greater. The real decision we are going to have to make relative to these other issues is not this one. If in fact the staff forecast turns out to be relevant to the consideration here, the difficulty that we will have with the secondary effects in the markets will not be the first 100 basis points. It will be the second 100 basis points. And then I think we are going to have some very tough choices to make. Governor Heller.

MR. HELLER. Thank you, Mr. Chairman. I broadly agree with that strategy as the right strategy. Where I may differ a little is on the tactics. Like you, I find it very encouraging that long-term rates have remained sort of stable. That has certainly been a very good sign. When it comes to choosing between the alternatives "B" and "C," I think this time around we see quite a bit of a gap between the alternatives the way they are specified. Usually, they are almost touching each other. This time there is a considerable gap. The way I read it, the federal funds rate associated with "B" is about 8.4 - 8.5 percent; with "C" it's about 8.9 - 9 percent. And so there is that considerable hole in between. I think the right policy is right in between that. I'm very much in agreement with you that where we want to get is to a funds rate of 8.7 - 8.8 percent. Now, as far as the tactics are concerned, I certainly think your--

CHAIRMAN GREENSPAN. You're going to the metric system. That's an inside Board joke.

MR. HELLER. Thank you for this--one small step at a time. The discount rate versus tightening by raising the level of borrowing: I think we all agree the announcement effect right now that we are tightening would be stronger with a discount rate move, and I think I would lean toward doing it with a stronger announcement effect just to make it clear, to put the marker out there that says the Fed is tightening. It's not a snugging exercise but a move to stay ahead of the curve. We'd also put ourselves in a position to be ahead of the EMS--I mean, all the European currencies--which we probably will not be perceived as being if we do it in a gradual escalation of the borrowing requirement. It can be read much more that we know the dollar will be coming under pressure and the Fed is reacting to those pressures in the exchange market. If you move with a discount rate right now when clearly there are no pressures, you forestall that kind of a constellation. And finally, the spread between the fed funds rate and the discount rate is very large. It will become larger if we just tighten, and then the market clamor will continue about when the discount move finally is going to happen. So, we won't get over that particular psychological hurdle; we will still have that hanging behind us. So, to sum up, I probably would go with a discount rate increase right now of 50 basis points and then some additional

tightening if it's necessary late in the period to come out exactly where you want to come out with the federal funds rate.

MR. PARRY. Well, you mean, then reduce the borrowings?

MR. HELLER. Well, I don't know what the borrowings--

MR. PARRY. Well, I mean, that's the implication.

MR. HELLER. I'd just do it in rates, right?

MR. HOSKINS. You want short rates at 8.9 percent, or something like that?

MR. HELLER. No, 8.7 to 8.8 percent.

MR. HOSKINS. I just wanted to be clear on that. Can I just ask a question about something several people have suggested already and that I agree with? The market expects some tightening, but we don't really have an estimate of what that is. Don may be able to help us with that. And a related second question is, to what extent is a rise in the discount rate expected in the market?

MR. KOHN. Peter may have another view, but my reading of the structure at the very short-term end of the market is that the market has close to a 1/2 percentage point [increase] in the rate built in. Sometime in the first quarter market participants expect the funds rate to be close to 8-7/8 - 9 percent, or something like that.

MR. STERNLIGHT. I would agree with that. I think a discount rate increase had been very imminently expected just after the employment numbers. I think it's still kind of expected. It does not seem to be that much on the edge of the table as it was maybe a week or so ago in the market.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I agree completely with the Chairman's scenario. That's the one that I had in mind when I came into the meeting. I think it's certainly worth discussing the discount rate, and maybe I can be convinced, but I still feel the best option is the one the Chairman outlined. In part, I think if you move on the discount rate, you will run the risk of its seeming to be part of a coordinated world-wide upward ratchet in rates about which I have already expressed some concern. But I also have a little concern that if the [new rate] is considered to be sort of the peak [in rates]--I realize that may not be the case for a lot of you--but if it is expected, given the yield curve, that we really have made the final move and the next move will be to lower rates, I think that's going to put some pressure on the dollar. Moreover, I don't think it's a bad idea to leave the discount rate hanging in peoples' mind as a means of support for the dollar. And so, I see the scenario the Chairman painted as the best one.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I saved my policy comments until now, and I discovered at the end of the other discussion that I may be the only

one who hasn't commented on policy. My view, basically, is that I'm concerned about inflation. I think it's too high and I think it will probably go somewhat higher in the coming year, so I don't disagree with that view. But I also feel, given the restraint that we've exercised over the last two years in general, that inflation is not going to get away from us. I take some comfort from what's going on with long bond yields, as some people have mentioned. And I think we have to put the inflation in a longer-term perspective in a sense and say that to some extent the seeds for the inflation we are looking at now were sown in 1985 and 1986 when we had 12 - 15 percent growth rates in money. And I think to attempt to wring it out all at once-- and this is consistent with some other views that have been expressed here--to try to deal with that too aggressively is just going to take us off the track as I mentioned at the last meeting of really making long-term progress on the inflation front. And if you take a reserve or aggregate base view of what Don was expressing earlier in terms of real interest rates, I think the course we've been on particularly in the last 6 months or in the last 3 months, and particularly where we've had virtually no reserve growth, incremental tightening at least viewed from that perspective could lead to negative reserve growth that is going to hit the economy a lot harder than people may appreciate.

So, what I'm saying is that in general I've been quite satisfied with the course we've been on, and I wouldn't advocate substantial additional tightening at this time. I would certainly build into what we are doing what is in effect discounted in the market. In other words, I would definitely support being in a position where our degree of reserve restraint, however defined, would result in a funds rate of somewhere around 8-1/2 to 8-5/8 percent at this time. And I wouldn't object to steps that might lead that modestly higher. But basically I've been satisfied with the degree of restraint and, I think Bob Heller said it right, our primary concern has to be inflation. So, I'm not reacting to what we might set off in this area or that area [of the economy] and we ought to worry about that and that should hold us back. What I really worry about is a very volatile path of policy that in effect makes our long-term job harder. We are coming off a very difficult period. I think everybody here appreciates that in the 1980s and maybe the experience in 1985 and 1986 was sort of the last chapter and that to the extent that we can stay on a relatively steady sustained growth of monetary stimulus, I think that would be most constructive. I'd hate to see actions that would disrupt that. So, implicitly I would not favor a discount rate increase at this time.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I think that an increase of \$100 million in the borrowing is woefully inadequate. It seems to me that we've spent two days talking about projections for the economy that all come up to the same conclusion; that is, that actual inflation rates stand a good chance of rising next year; that underlying inflationary pressures are building; and that the economy, if anything, has been surprising us on the upside. I think a move of about 1/8 percent in the federal funds rate is just nothing at all. It seems to me that a bare minimum would be alternative "C". And I would think as well that the best way to implement that would be something that would be more public in nature and would catch the

attention of those in the financial markets. With regard to the point that was made several times before about risks to the financial sector, I think that history would suggest that the risks are quite different from what has been described. It seems to me that the greatest risk is for us to get behind the curve, and I think we are in great danger of getting behind that curve at this point because in that event what will happen is that interest rates are going to go to even higher levels at a later point; and the burden on the financial sector would be even greater than if we were to move in what I would consider to be a convincing way at this point.

CHAIRMAN GREENSPAN. The suggestion on the table is effectively that [result] by early January--

MR. PARRY. I think if you had asked me what my recommendation was, I would have said something stronger than "C".

CHAIRMAN GREENSPAN. Then you want "C+"?

MR. PARRY. Well, "C-"

MR. HOSKINS. Alternative "gong."

MR. JOHNSON. "C-"

CHAIRMAN GREENSPAN. That's a "C-".

MR. PARRY. What seems appropriate to me would be \$300 million or \$400 million and an increase in the discount rate. And I think that a bare minimum acceptable to me would be a \$200 million increase today.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mr. Chairman, I think if we've learned anything this morning, it's that we don't live in a riskless society or riskless world. But I think the central question before us--and it's going to continue to confront us as these risks continue--is whether or not those risks should constrain or inhibit monetary policy. I come out feeling as Governor Heller expressed it earlier that we should not be so constrained in the absence of some emergency which we can deal with at the time. Like you, Mr. Chairman, I think the risks of recession are fairly slight. I think what we are faced with is a very strong economy, one that has not really moderated as much as we had hoped. The economy is growing at a rate above its potential, and I think the job before us is to contain the inflation and to slow this economy down. Now, I think that the danger is that we don't do enough at this time to send the signal to the market and confirm the credibility that we already have. In implementing that kind of strategy, my preference would be for a discount rate increase. But if that is not the action of the Board, then I certainly think we need to move now on open market operations. Moving \$100 million now and \$100 million in January would be acceptable to me because I don't feel that that time differential will be all that great. But I do think that we need to move in that direction. So, I would support your prescription.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I think your prescription is right on target. I think it appropriately balances what we need to balance. I think that open market operations are much preferable over the discount rate; a discount rate hike would be too much at this point. So, I agree with you. I'd like to just comment on this business of the discount rate and the spread between it and the funds rate. That has been a classic reason given for adjusting the discount rate. But I think, given the technique that we use to operate open market operations with this borrowing, that we simply have to live with ever widening spreads unless we want to raise the discount rate at the same time we want to ease open market operations. I think that sends conflicting signals. To the extent that the widening spread does raise expectations of an increase in the discount rate, I think we ought to do away with that. And it might be well, Mr. Chairman, at an appropriate time either in a speech or at testimony simply to indicate that the spread no longer means what it once did in terms of considerations of whether we change the discount rate or not. In my point of view, the reason you change the discount rate in today's world is that you want an announcement effect either domestically or internationally. And whether the spread is 100 basis points or 500 basis points doesn't seem to me to be terribly relevant.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I won't use all my arguments about a discount rate increase now because I've already made them to the Board. And the Board members understand my view very well on that. I would comment, Ed, that it seems to me in the environment that we are in now that there is a substantial difference between a discount rate increase and an increase in the federal funds rate through open market operations.

MR. BOEHNE. I agree with that.

MR. ANGELL. And the difference is that you are indicating you want rates to be higher and one reason to have a higher discount rate is that you would encounter I think increasing difficulty of managing borrowing at the discount window at \$600 million, given Don's surveys of where banks' reluctance to come to the window may be. I think that we have a somewhat more stable borrowing target at \$300 million or \$400 million than I think we would have at \$600 million or \$700 million. And I would want the discount rate to be high enough not to have to have what I would call a more unpredictable borrowing target. Now, my view is that whatever we do is going to have some announcement effect. We are not going to make a move after this meeting and have everyone say they didn't understand what the Federal Reserve did. By next Tuesday or Wednesday, no one will ask whether we have moved or haven't moved. In this scenario we are talking about, everyone is going to know that we moved. So, there is going to be an announcement effect. And the discount rate is not ringing the gong; the discount rate is a regular procedure that you use when you want to tighten policy, when you want higher interest rates. And those higher rates will be consistent with slower money growth. So, I'm clearly in camp "C". Now, I'm in camp "C" because I believe very strongly that the chances of our getting into recession are much less by taking the action that needs to be taken to give us some chance to have some scarcity of money which will show up in some commodity prices and in exchange rates and show up to give some expectations. The thrift

industry is going to be much [unintelligible] for us to deal with this as the Board dealt with it in 1984, and it's more difficult to deal with it now than in 1984 because the economy is further along. But if we wait until the end of 1989 or the middle of 1989 to get into this and if Jerry's staff is right in their inflation forecast and if inflation gets away from us, that's the recession scenario, that's how you're going to buy the recession. I'm convinced that there's no immediate danger to the real economy at this stage. And I think it's a little more above board and will be clear in everyone's mind as to where we are if we do it in a very solid manner. So, I favor "C" and I, of course, would prefer to do it with a discount rate increase rather than doing it with a \$600 million borrowing target.

CHAIRMAN GREENSPAN. Governor LaWare.

MR. LAWARE. I like the scenario that you have outlined. I guess the only part of it that concerns me a little is allowing an historically broader range between the discount rate and the funds rate. It would not bother me to see the funds rate go to 9 percent. So that's 250 basis points. By doing that are we muting the announcement potential of future discount rate changes? In other words, are we heralding our "gong," are we wrapping it in swaddling clothes or something like that?

CHAIRMAN GREENSPAN. Make sure that is recorded for the record!

MR. LAWARE. Not to be too precious about it, let me just suggest that instead of ringing the gong, that in connection with this move we might just "jingle" the bell--that's a seasonal pun!--and perhaps not move the discount rate a full half point but rather move it a quarter point, which says something to the marketplace. It says that we are still using the discount rate with some announcement value, but it doesn't ring the gong quite as loudly as a full half point might. But I like the gradual approach to the borrowing target.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I agree with those who think that we need some further tightening and that we need it right away. I came in here favoring something between "B" and "C," which I interpret to be pretty close to what you've proposed, Mr. Chairman. One way we might approach that--a little elaboration on that--something we used to do would be to just put a range on borrowings, \$500 to \$600 million. Not only does that have the value of getting us in the direction we want to go, but given the uncertainty between interest rates and borrowings these days, it gives us a little more explicit flexibility it seems to me in terms of how policy is implemented. The only thing I would add to all of that, this is certainly for more serious consideration in February rather than immediately, is that I do think we should keep an eye on the long-term situation. I would admit that I take some comfort in the modest growth we've had in M2 over the last year or two, though I wouldn't bet the farm on it. But in light of that modest growth, I wonder if a 7 percent upper limit on the M2 range in 1989 is really appropriate. And it strikes me to be on the high side given M2's performance in the last year or two.

CHAIRMAN GREENSPAN. I think we will revisit that at the next meeting.

MR. STERN. Right.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. In terms of the Bluebook alternatives I would favor alternative "C," but I certainly would not wildly object to the approach you suggested, Mr. Chairman, which essentially involves sneaking up a little bit on alternative "C". There is an interesting question that I think we can now call the "gong show," a variety of both strategic and tactical questions here that arise in the context of a discount rate change. Indeed, I guess if I step back from everything, which one never has the liberty of doing, and I said to myself that I thought it was unlikely that there would be an increase in interest rates in Europe and I made a variety of other assumptions, I could easily talk myself into the view that the absolutely ideal policy would be the combination of a discount rate increase and, say, \$500 million in borrowings. That probably would mean that federal funds rates would end up somewhere on the north side of 9 percent rather than the south side of 9 percent. Then, I'd bring myself back a little bit from the ideal and start to superimpose on the way things are in terms of the gong show. And I guess where I would come out is to do alternative "C," but--and this may surprise some people--I probably would leave the discount rate on the bench for at least a moment or two. I worry as does Governor Johnson about the symbolism of getting caught up in what appears to be a worldwide ratcheting up of interest rates especially if there is the appearance that we are in effect getting forced into that posture to stay in lock step with the Germans. What I'm not sure about as a practical matter is whether there is a way to avoid that at this point, since the expectation is widespread in the marketplace that they are going to raise their rates in the very near term anyway. I don't like that at all. And that does influence my thinking in terms of the tactics of the situation. The other thing that keeps rolling around in my mind is the question that Bob Parry raised rather directly and I guess I flirted with in my earlier comments. Suppose that despite the varying degrees of comfort that we draw from long-term interest rates that we are wrong or the markets are wrong or both? What is the kind of thing that will most graphically signal that to us in the near term? And I think there are two [unintelligible] the inflation statistics themselves start to show through. And the second is that, for example, we could get another huge increase in employment in December. Now, Gary was talking before about a 200,000 increase; that sounds high to me. If anything, I think that employment increases may have to be smaller than that. But suppose we get another 350,000 or 400,000 increase in employment right now, which I don't rule out as a possibility. That kind of contingency is another reason why I have a slight preference to keep the discount rate in abeyance at this moment. But I certainly think that at the very least we should get to something as described in the Bluebook as alternative "C" and I think as you've described it as quickly as possible.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. Well, as Governor Kelley indicated earlier I have been an advocate of alternative "D" on various occasions. We now have alternative "gong" which I interpret to be a discount rate move as opposed to "C". Not wanting to be the Paul Erdman of this Committee, I do have concerns along the lines Tom Melzer indicated. But I think that Governor Angell's summation on the discount rate is the appropriate one. So, my preference would be to do a discount rate move and adjust the borrowing targets to ensure that rates are where I think the market expects them which is someplace around 9 percent. Your proposal, Mr. Chairman, if I read it correctly if we do \$100 million now and are sure of doing \$100 million later I think is livable. I have a comment on the riskless society. Bob Forrestal indicated the fact that there are risks every place out there. There's one exception, however, and that's deposit insurance. I had to get that clear. And, secondly, with respect to the point that Bob Parry made, I think that's an accurate observation. I would suggest that if this Committee had acted differently in the late 1970s, we might not have avoided an LDC debt crisis but the magnitudes would have been a lot lower in terms of the outstanding debt, the problem that we are facing right now. I would link that to the current context of the LBOs, that we may be building the same kinds of things right now with respect to LBOs. And I think a signal by this Committee that rates are moving upward and we are concerned would be the appropriate signal to give.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, while the risks clearly are on the side of inflation as we've said, not economic growth, it does seem to me as we've gone through the year and particularly starting in the late spring we've been responsive to that concern. And I just don't have quite the feeling that others may have that we've fallen behind the curve on this one. Certainly, at this time I think further tightening is appropriate. And the scenario that you outlined is just right. I would not raise the discount rate now. I would simply raise the borrowing level and initially the fed funds rate to 8-3/4 percent and maybe moving up to 9 percent as we get into the new year would be appropriate. But I'd hold the discount rate for something a little bit more overt than we see now to make that move more appropriate from the point of view of the market.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I'm on the side of the gentleman from St. Louis, President Melzer.

MR. MELZER. There's no gentleman here!

MS. SEGER. The young boy from St. Louis!

MR. BLACK. He just retracted his comment!

MS. SEGER. I was trying to flatter him. It didn't work.

MR. BOEHNE. Stand up, Tommy.

MS. SEGER. Anyway, I would be opposed to a discount rate hike now. I would remind you of what the announcement effect did in

the summer, or actually September, of 1987 when the discount rate was hiked and the idea was that long-rates would decline as a result and short rates would rise. Instead, all rates rose as I recall. And the only thing that didn't rise was Wall Street in October when we had a slight problem with the stock market. Again, their "gong" was done in order to sweep up the heavy pile of paper, and the blood on the floor. But anyway I think it would be bad now in that sense. Also, we are right in the middle of the Christmas selling season. And again if you want the announcement effect, I can't think of a worse time unless you really want to cause retail sales to go into a tailspin at a time when for many merchants, a third, 40 percent of their annual sales take place around the Christmas holidays. And, frankly, I just don't think it's needed. The monetary aggregate growth has I think looked pretty good, pretty responsible. Si Keehn said we've had a number of tightening moves since last spring. And I'm not convinced that we've seen all of those impact the economy yet. So, as I said, I'm on Tom Melzer's side.

CHAIRMAN GREENSPAN. President Black.

MR. ANGELL. That's "B" without any change in borrowing?

MS. SEGER. Yes.

MR. BLACK. Mr. Chairman, I would favor "C". I have never differed with you since you've been here, and I do so with great trepidation today because I have such respect for your judgment. But I think the market has expected a discount rate increase, and I think if we don't get one it might be interpreted as some lessening of our resolve to deal with this problem we see developing. And I think there's also a lot of substance to the point that Governor Angell made that if we are concerned about the lack of a firm relationship between the level of borrowed reserves and the federal funds rate, I think that would be exacerbated by letting that [rate spread widen] still further. But at the same time I want to be reasonable on this, and I can see the merits to what you've said. I can certainly see the merits to what Tom Melzer has said because the aggregates do concern me a great deal. I would not be willing to go this far if I didn't see a sign that they were beginning to move. I would like to bargain with you a little bit on that \$100 million and make it a little higher than that. But I don't think it's an important enough difference that I'd want to go to the mat on it or anything of that sort. I'd really like the discount rate to be a part of it.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, I fully support your suggestion. I would only add that as I have listened to the comments around the table about the gong-ringing possibility, it has been expressed as merely a matter of timing. We may very well indeed need to ring the gong. I don't think we need to do so now, because I think that there is at least some possibility that we may not need to ring it at all. So, I just would like to have that possibility on the table.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. Mr. Chairman, my position would be to move on the discount rate. I think that would be the much preferable way to

go. If the Board doesn't see it that way, then certainly alternative "C". And I'd move pretty fast on the borrowing.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, when I came to the meeting I preferred "B-C", someplace in between those two. But I have no problem with the proposal that you've laid on the table with the exception of the potential need for the second \$100 million sometime early in January. If it becomes evident that that's an appropriate move, then I think the Board should again look at the use of the discount rate at that time rather than today. I'd hold it in abeyance. You may find it helpful in supporting the dollar after the turn of the year. I would not want to do it now because as has already been mentioned at least it's my impression that other rates around the world probably are going to increase, and I wouldn't want us to be a leader in that parade. So, I would hope that we could accept the proposal that you have laid on the table, \$100 million now, and a very careful look whether to do the second \$100 million or whether to do a discount rate increase sometime in January.

MR. BLACK. Mr. Chairman, could I ask for some clarification? The \$100 million, would you anticipate this would move the federal funds rate to 8-7/8 initially from 8-5/8 percent?

CHAIRMAN GREENSPAN. The first \$100 million?

MR. BLACK. Yes.

CHAIRMAN GREENSPAN. I think it's 8-5/8 to 8-3/4 percent; the second \$100 million is 8-7/8 to 9 percent.

MR. PARRY. The Bluebook alternatives are posed in terms of 8-3/8 percent as being alternative "B," is that correct?

MR. KOHN. 8-3/8 to 8-1/2 percent.

MR. PARRY. Okay, so you're adding an 1/8 to that.

MR. KOHN. Well, adding a 1/4 to that for \$100 million and then 1/2 for \$200 million.

MR. PARRY. Okay.

MR. STERNLIGHT. But be aware too that we are coming into the year-end period and seasonal factors could add on something to that first 1/4.

MR. HOSKINS. Well, one more clarification. Your proposal is to do \$100 million now and then take a look at whether we need to do another \$100 million?

CHAIRMAN GREENSPAN. Let me clarify later. I think we should get around to everybody who wants to talk. Bob Eisenmenger, I don't think you have indicated your preference, if you want to give one.

MR. EISENMENGER. Well, I think I would prefer to move a little faster than you have proposed, but it's a mild preference. As

far as the discount rate is concerned, that is a determination for the Board anyway. They might wish to do it, but not do it immediately--do it toward the end of the year.

CHAIRMAN GREENSPAN. I think Roger Guffey has captured as best it can be done the [consensus] as it has been stipulated by the various members of the Committee. I would propose that we go immediately with \$100 million and asymmetric language, with the understanding that unless something significant that is not now perceived occurs that we go the second \$200 million in January.

MR. KOHN. Second \$100 million.

CHAIRMAN GREENSPAN. I beg your pardon; I meant to say a second \$100 million in January. But should the Board of Governors at any time between now and then decide to move the discount rate, we would then have a telephone conference call to readjust the borrowing requirements to calibrate them in the context of either fully offsetting the \$100 million, or the \$200 million, or perhaps only one of the [\$100 million steps]. This means in effect that it is possible, depending on the telephone conference should it appear that way, that we could go to shy of 9 percent or north of 9 percent on the federal funds rate, as Jerry Corrigan says.

MR. PARRY. I don't want to nitpick, but would you envision yourself visiting that issue two weeks from now or six weeks from now?

CHAIRMAN GREENSPAN. I would say three weeks.

MR. ANGELL. It would seem to me the Chairman said either then or before then as I heard it.

CHAIRMAN GREENSPAN. Yes, the discount rate is reviewed once a week.

MR. ANGELL. The Board meets regularly.

MR. PARRY. No, I meant this second \$100 million; I'm sorry.

MR. ANGELL. Oh, okay.

CHAIRMAN GREENSPAN. Well, basically it really is the second maintenance period.

MR. PARRY. Two weeks from today?

MR. JOHNSON. The third or fourth week.

MR. PARRY. Two weeks from today?

CHAIRMAN GREENSPAN. Yes.

MR. BOEHNE. Well, you can't be that precise. You've got all that year-end churning, and if the year-end churning takes you up to a high level, you might not want to jerk the rate back down.

MR. JOHNSON. That's a good point because that might be the time.

MR. BOEHNE. Right.

CHAIRMAN GREENSPAN. The point being, if you were asking me if was I contemplating or talking about the end of the intermeeting period, the answer is that I was not. This is an issue which, as I originally stipulated and I think is right, is to be considered sometime early in January. That to me is three weeks from now.

MR. HOSKINS. And that means that unless something of major significance happens in the economy or financial markets that we will do roughly 50 basis points either through a combination of discount rate or--

CHAIRMAN GREENSPAN. Let me be very specific. If nothing material happens, then I think the Desk will automatically add \$100 million to the borrowing requirement. If, however, in the period prior to then, or subsequent to then, the Board decides to move the discount rate, we'll have a telephone conference to adjust the borrowing requirement in line with the instructions of the Committee.

MR. ANGELL. I think that's a satisfactory solution.

CHAIRMAN GREENSPAN. The official directive under that would be to go \$100 million with asymmetric language. I'm not certain that any further language is required in the directive.

MR. BERNARD. [The operational paragraph would read as follows:] "In the implementation of policy for the immediate future the Committee seeks to increase somewhat the existing degree of pressure on reserve positions. Taking account of indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from November through March at annual rates of about 3 and 6-1/2 percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 6 to 10 percent."

MR. BLACK. 6 to 10? I thought it would be 7 to 11.

SPEAKER(?). Well, it should be 7 to 11.

MR. ANGELL. It should be 7 to 11.

SPEAKER(?). We are going to be up 50 basis points.

CHAIRMAN GREENSPAN. We will increase the funds rate up to 50 basis points.

MR. HELLER. 6-1/2 to 10-1/2.

MR. JOHNSON. 6-1/2 to 10-1/2.

MR. ANGELL. Well, we've never done that. We've had successive moves.

MR. HELLER. How about 7 to 10?

MR. ANGELL. Why narrow the range?

MR. HELLER. Well, (a) a lot of us thought that would be a good thing to do; (b) it gets us to that midpoint that you want to get to, a midpoint of 8-1/2 percent.

MR. ANGELL. Well then, we are going to have to do that every time we have a move,

CHAIRMAN GREENSPAN. It isn't worth arguing about this particular issue; this is an inoperative instruction anyway.

MR. ANGELL. Well, I know it, that's why--

MR. JOHNSON. I certainly don't care.

MR. BLACK. If we leave it at 6 to 10, we've got the midpoint below where we are now. I'm not sure where we are. Are we at 8-1/2 or 8-5/8? I think we are at 8-5/8.

CHAIRMAN GREENSPAN. We will go to 7 to 11 now.

SPEAKER(?). 7 to 11 is okay.

CHAIRMAN GREENSPAN. 7 to 11.

MR. BLACK. It shows the gamble we are taking!

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Corrigan	Yes
Governor Angell	Yes
President Black	Yes
President Forrestal	Yes
Governor Heller	Yes
President Hoskins	Yes
Governor Johnson	Yes
Governor Kelley	Yes
Governor LaWare	Yes
President Parry	Yes
Governor Seger	No

CHAIRMAN GREENSPAN. The next meeting is on February 7th and 8th. Lunch is served.

END OF MEETING